

AC 4436(3) PLYMPTON ST. MARY

PLYMPTON ST. MARY

RURAL DISTRICT COUNCIL.

Annual Report

FOR 1912,

OF THE

Medical Officer of Health,

S. NOY SCOTT.

D.P.H., LONDON., L.R.C.P., LOND., M.R.C.S., ENG.

Devonport :

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TO THE
PLYMPTON ST. MARY
RURAL DISTRICT COUNCIL.

Annual Report

OF THE MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1912.

GENTLEMEN,

Herewith I have the honour of submitting to you my Annual Report on the Public Health of the Plympton St. Mary Rural District for the year 1912.

As the report is, not only for your own information, but also for that of the County Council and the Local Government Board, it will necessarily contain various statements which are mere repetitions of former reports, or which may appear superfluous to you, but yet are of importance to those who have to derive their knowledge of local circumstances and questions directly from this report. It will, therefore, be arranged on the basis suggested by the Local Government Board, and will therefore deal with the following:—

- (1) The physical features and characters of the District ;
and a comprehensive description of the geology for
which I am indebted to my friend R. Hansford
Worth, Esq., C.E.
- (2) The water supply of the district and of its several
parts, and the condition of the rivers and streams ;

- (3) The sewerage and drainage, and the disposal of excrement and house refuse ;
- (4) The house accommodation, especially of the working classes ; and the administration under the Housing and Town Planning Act ;
- (5) The milk supply and its control ;
- (6) The vital statistics of the year with comparisons between this and preceding years ;
- (7) Notes on the diseases prevalent during the year, and the means adopted for dealing especially with infectious diseases and Tuberculosis ;
- (8) A description in detail of the sanitary conditions of the particular parishes and villages, with notes on the work done during the year, and on what is wanted in the future. This section should be read and compared with the report of your Sanitary Inspector, Mr. W. E. Horton ;
- (9) Notes on the powers possessed and exercised by you over Buildings, Slaughterhouses ; Dairies, Cowsheds, and Milkshops ; Bakehouses, Factories, and Workshops ; and Offensive trades. etc. ;
- (10) The condition of the Public Elementary Schools, and measures taken to safeguard the health of the children therein.

In the table of statistics it will be noticed that I have estimated the population to have increased from last year.

A reference to the details given in the paragraphs dealing with each parish and to the report of the Sanitary Inspector will show that much valuable work has been done, especially in improving the details of sanitary accommodation. The more especial work is shewn in the epitomes.

THE HOUSING AND TOWN PLANNING ACT, 1909.

A large number of inspections have been made in accordance with the scheme prepared at the beginning of the year. Systematic records have been made of 271 houses. Twelve of these have been condemned as unfit for habitation, and for nine of them closing orders were issued. The other 3 are being demolished after a friendly conference with the owner, and three new ones will be built in their place. Five of the orders have been complied with by vacation—one house has been put in good repair; for one house the order has been suspended temporarily because of the age of the sole inhabitant. In 2 cases the occupiers have as yet been unable to find other houses, but they have promised to take the first opportunity of moving.

A very large number of improvements in sanitary accommodation, in light and ventilation have been made as the result of friendly conferences with the landlords and generally speaking, in cases where improvements are possible, the owners have met our requests with willing co-operation. There is still a great deal of work to be done under this Act, and although some opposition is promised and is indeed to be expected, yet I have good reason to hope that we shall gradually but surely improve the condition of the cottages in the district. The chief difficulty is found in those cases in which the houses are too old or dilapidated to get the landlord to incur expenditure which would be altogether out of proportion to the rent obtainable. In these cases I can see nothing between dishousing the tenants (with the possible result of their being unable to find another house), or leaving them in possession, and for such cases the only remedy is to be found in the building of new cottages. Landlords can hardly be expected to build when they cannot obtain a fair percentage on their outlay and I therefore suggest that the Council should exercise the powers the Act gives them and themselves build some cottages. In many of the villages such cottages are wanted, although on the other hand such demand is chiefly due

to people who wish or have come into the villages to live rather than by those who have been born and lived there. In some villages the dearth is chiefly due to people who take cottages for week-end or holiday purposes ; or because it is cheaper or more pleasant to live in the country and go to work in the neighbouring towns of Plymouth and Devonport—so that strictly speaking there are sufficient cottages for those who work on the surrounding land and this is becoming more obvious as emigration to Canada and elsewhere proceeds. The rents in some of the villages are very low—varying from 1/- to 2/- a week and to most of these cottages a large garden is attached ! These cottages are however, chiefly owned by the larger landlords. There is very little overcrowding in the legal sense but 8 cases have been dealt with during the year.

It would be wise, however, to obtain definite information as to what number of additional cottages are required, and I therefore suggest that the Council should issue a large poster asking for such facts.

I am glad to repeat my satisfaction at the way in which the Sanitary Inspector performs his duties, and I am also very grateful to the members of the Council for the ready way in which they support any suggestions I have put forward—from time to time—for improving the Sanitary administration of the District.

In conclusion I wish to draw particular attention to the epitomes on the next two pages—both of which afford good evidence of the foregoing statement.

I am, Gentlemen,

Your obedient servant,

S. NOY SCOTT, M.O.H.

EPITOME OF THE MORE IMPORTANT FEATURES OF THE YEAR.



BIRTH RATE—lowest on record—18·76 per 1000.

MARRIAGE RATE—highest for many years—16·78 per 1000.

DEATH RATE—lowest on record—10·82 per 1000.

INFANTILE DEATH RATE—lowest on record—78·23 per 1000.

Entire absence of Deaths from Diarrhœa.

ZYMOTIC DEATH RATE—lowest on record—0·22 per 1000.

Marked fall in number of cases of Diphtheria.

Record fall in number of cases of Enteric fever—only 2 during the year.

Marked rise in the number of cases of Scarlet fever.

Increased supervision of cases of Infectious Diseases, especially among children, and of Tuberculosis.

Removal of Midwives from direct control of M.O.H.

Highest Rainfall for many years.

EPITOME OF THE MORE IMPORTANT WORK OF THE YEAR.

PLYMSTOCK—1. Completion of Sewage works for ELBURTON, and connection of nearly all the houses thereto.

2. Plymstock Villas—Drainage scheme prepared.

EGG BUCKLAND—1. 1183 feet of new sewer laid for Drainage of Crown Hill Villas into the St. Budeaux sewer.

2. Two new Screening Chambers constructed at the Sewage works.

3. New water supply scheme for Crab Tree and Longbridge, sanctioned by L.G.B.

St. BUDEAUX—1. 240 feet of new sewer for drainage of cottages into the Tamerton sewer.

2. 1100 feet of new sewer constructed for drainage of Alexandra Cottages.

PLYMPTON St. MARY—441 feet new sewer laid for the drainage of Priory.

LEE MILL—water supply increased by addition of another spring.

HOLBETON—Collecting pipes of water supply taken up, cleaned and relaid.

YEALMPTON—Dunstone—collecting pipes of water supply taken up, cleaned and relaid.

BICKLEIGH—Plans of drainage of Roborough prepared.

HOUSING AND TOWN PLANNING ACT—

271 houses inspected,

12 condemned as unfit for habitation,

3 pulled down, and closing order served for 9,

5 closed in compliance with order,

64 new water closets erected,

53 repaired and provided with flushers,

118 new house drains laid.

Annual Report

OF THE MEDICAL OFFICER OF HEALTH,

FOR THE YEAR 1912.

THE AREA of the Plympton St. Mary Rural District for Sanitary purposes is 73,426 acres, of which 174 is inland water.

The district is situated at the extreme west of the South Hams, and is bounded on the North by Dartmoor and the River Tavy ; on the South by the English Channel and the towns of Plymouth and Devonport ; on the West by Plymouth Sound, Plymouth, Devonport, and the River Tamar ; on the East by the hilly district of the South Hams.

From the hills lying on the East and North there are a series of undulations, running mostly towards the sea on the South and West, and along the valleys thus formed are the Rivers Erme, Yealm, and Plym, with their tributaries.

In the North part the land is chiefly moorland and contains valuable china clay works. The remainder of the district is mainly agricultural, and in most places in a good state of cultivation. The surface is well wooded.

GEOLOGY. With such slight exception as to be unimportant, the whole area of the District is occupied by rocks either of the DEVONIAN formation or by POST-CARBONIFEROUS granite.

The DEVONIAN rocks are for the most part highly cleaved shales and slates with some grits and quartzites and a less quantity of limestone. Cotemporaneous lavas also occur and some diabases. In the larger part the lavas and tuffs have also taken on a slaty cleavage, and are best described as schalsteins. The soil, although not deep is rich and fertile ; and from the nature of the underlying rocks, which are not only highly cleaved but almost always of loose texture near the surface, the soil is well drained and therefore cold wet lands are rare.

The general trend of the various rock formation is from west to east, with a slight inclination towards the north.

The granite of Dartmoor lies to the north, and the exterior commons in the parishes of Shaugh Prior, Cornwood, and Harford are all on granite. As a rule the cultivated land does not extend far over the border of this rock, and accordingly the population is sparse in those parts.

The parish of Dartmoor extrudes two minor bosses, severed from the general mass at Crownhill Down and Hemerdon Ball, and around these as well as on the border of the main boss the sedimentary rocks have been subjected to contact metamorphism and altered both in texture and mineral composition. The only important economic product of their alteration is a banded silicious rock which is worked for road metal.

The GRANITE itself is however of very considerable importance, not as a building or road material, although to a small extent it is so utilized, but in its altered condition, from the decomposition of its felspar, it becomes the source from which CHINA CLAY is derived.

In the parish of Shaugh Prior are situated Shaugh, Wotter, and Lee Moor Clay Works, of which the latter is by far the most important, and it produces a clay of the highest grade. The pit is one of the largest in Devon and Cornwall, and a

large number of men are employed at the works. In connection with Lee Moor is another important work at Cholwich Town in the parish of Cornwood, and on Crownhill Down, partly in the same parish and the parish of Plympton St. Mary, are several other China Clay works.

The LIMESTONE runs in two parallel bands separated by a short interval of slate, from the banks of the Cattewater and the Laira, due east to East Sherford in the parish of Brixton. The great bulk of this mass lies in the parish of Plymstock, where there are large quarries at Turnchapel, Hooe, Oreston, Pomphlett and Billacombe, and smaller ones at Elburton. After an interval of about a mile a small body of Limestone is again found north of Brixton Church and extends nearly a mile eastwards; south of this at Kitley, is another mass. and then occurs the Yealmpton limestone lying partly in the parish of Yealmpton, and partly in the parish of Newton Ferrers. This is sub-divided into several minor parts and extends a little beyond Yealmbridge. Much of this limestone is used for building purposes, or for burning into lime. The smoother blocks are capable of taking a high degree of polish and are then very beautiful.

The GRITS all lie in the southern part of the district and are best developed at Staddon on the shore of Plymouth Sound where they were formerly quarried for paving purposes, and running eastward from this point, in a band diminishing from nearly a mile to a little over a quarter mile in width, they cease before reaching the Yealm. Commencing again at Newton Ferrers as quartzites, and extending in somewhat varying constitution from the east bank of the Yealm to the west bank of the Erme, in Holbeton, the belt averages over half-a-mile in width from north to south.

SCHALSTEINS and TUFFS are present in quantity to the north of Plymouth, in the parishes of Compton Gifford and Eggbuckland; westward they extend in patches through Weston Peverell to Tamerton Foliot and the Tamar;

eastward they occur in Plympton St. Mary. A long course of these volcanics commences at West and East Sherfords in Brixton, and at Brixton Village, and extends eastwards past Lyneham and Yealmpton in two belts, of which the northern reaches and passes Ermington and extends northward one mile in width to West Worthele ; and the southern, which is much narrower, passes Yealmbridge and terminates in a fault about a quarter of a mile from the Erme, near Hollowcombe.

The minor features of the geology of the district are very intricate but have small bearing on the distribution of the population or its occupation or health. There are practically no mines. The local clays and more largely the soft slaty shales are utilized in brick manufacture at Honicknowle, Compton Gifford, and Steer Point.

The CLIMATE is mild and humid, and the rainfall abundant, but no official meteorological records are kept. I am, however, able to include statements as to the rainfall of last year at Langham Hill, Ivybridge ; at Wembury House ; at Holbeton ; at Leigham ; and in Plymouth ; for which I am respectively indebted to Miss Glanville, R. H. Clay, Esq., the Rev. E. S. Powell, Vere Cholmondeley, Esq., and Victor Prigg, Esq.

The WATER SUPPLY. The district contains abundant and satisfactory water in the shape of streams and springs, but these are very unequally distributed, and therefore some of the villages—especially in the southern part of the district—are so far from them as to be almost entirely dependent upon wells.

The water is derived from the following sources :—

- (1) Upland surface water from Dartmoor, which, collecting in small streams and rivers, yields a plentiful supply of good and pure water from which large public supplies could be obtained.

- (2) Springs and deep wells : These are found in various localities, and yield a water whose quality depends entirely upon the particular soil in which the well is. In the limestone district the water is sometimes very hard from dissolved carbonate and sulphate of lime, and except for the hardness the water is good, and, generally speaking, very pure: i.e., free from organic pollution.
- (3) Shallow wells : These are scattered throughout the district and very largely consist of mere surface water. These wells afford a water which may be good or bad, according to their depth, position (proximity to cess pit, etc.), and liability to surface pollution. A Sanitary Authority should never be content with a water supply which is derived from shallow wells.

The Water Supply of the district on the whole is very good, although there are a few places in which improvements should be made. In the early part of the year I had to make a return to the Local Government Board giving full particulars of the supplies over the whole district. The following is a summary of that report :—

Parishes or parts of parishes supplied by a local authority (other than the District Council), or by a private proprietor:—

COMPTON GIFFORD, EGGBUCKLAND, ST. BUDEAUX, TAMERTON FOLIOT, BICKLEIGH, AND WESTON PEVERELL are for water supply purposes, either wholly or partly within the statutory limits of the Corporation of the Borough of Plymouth under various Acts of Parliament and Provisional Orders, some of which date so far back as the reign of Queen Elizabeth. The Corporation of the Borough of Devonport has concurrent rights of water supply in a portion of Weston Peverell. In all the above districts these two authorities

supply the water direct to the Householders and collect the rents, or else supply it in bulk to the District Council for distribution. Adding the connections which have been made in 1912, I estimate that 34 houses in Weston Peverell, 300 in St. Budeaux 150 in Tamerton Foliot, 92 in Eggbuckland, and 90 in Compton Gifford are now supplied from the Plymouth or Devonport mains. This number will be increased during the coming year as the hamlets of Crab Tree and Longbridge, in the parish of Eggbuckland are to be similarly supplied. The supply is constant and good.

SHAUGH PRIOR.

The village of Lee Moor has a constant and good water supply piped to the consumers. It is under the control and is the property of Messrs. T. Martyn and Sons, and about 100 houses are so supplied.

NEWTON FERRERS.

About 50 houses in this parish obtain water from a private supply owned by Mr. J. Ford. It is not satisfactory.

Parishes or parts of parishes in which the Council distribute a supply which is provided in bulk :—

EGGBUCKLAND.

Under an agreement which will expire in 1925, the Plymouth Corporation undertake to supply a minimum quantity of 730,000 gallons per quarter to the village of Eggbuckland. The number of houses so supplied is 69 and the average daily quantity supplied is 9,108 gallons.

The supply is good and constant.

Parishes or parts of parishes in which the supply is provided and distributed by the Council :—

CORNWOOD.

Cornwood Village and the immediate districts around as far as the Railway Station is supplied from springs which come from granite sources and which yield about 11,500 gallons per day.

There is a balancing reservoir of about 4,000 gallons capacity.

The water is a pure and soft one, and the supply is good and constant.

Lutton. Three springs from upland sources are piped to a balancing tank and thence distributed to stand pipes. The supplies are good and constant and yield about 5,000 gallons per day.

In the parish of Cornwood about 150 houses obtain water from one or other of the above sources.

HOLBETON.

A good supply of water is piped to the village, after being collected in a storage reservoir of about 3,600 gallons capacity. The quality is good. About 100 houses are supplied.

NEWTON FERRERS.

Torre—About 50 houses are supplied from a spring situated in land near the village. The storage tank has a capacity of 4,000 gallons. This supply is good in quality but the pressure in the pipes is hardly sufficient to adequately supply some of the houses on the higher levels.

PLYMPTON ST. MARY, PLYMPTON ST. MAURICE AND PLYMSTOCK.

The water for these three parishes is obtained from deep springs at Bottle Hill, yielding 99,000 gallons a day, and from similar springs in the granite at Lee Moor, yielding 199,000 gallons per day. The amount obtainable from Lee Moor can be largely increased from other springs at present running to waste.

There is a reservoir at Plympton holding 365,000 gallons, and one at Plymstock holding 100,000 gallons. The number of houses supplied is—in the two Plymptons 932, and in Plymstock 774.

The water is an exceedingly pure one and the service good and constant.

Sparkwell. Here is a public supply of good water, obtained from adits driven into deep ground and the water is thence piped to the villagers.

Lee Mill. The water obtained from springs situated in grass land above the village, is first collected in a small reservoir and thence distributed to stand pipes. The supply is good and will be increased under a new agreement now in preparation.

YEALMPTON.

Yealmp-ton supply is taken from springs on high land near the village and is piped to a reservoir of 62,000 gallons and thence distributed to stand pipes throughout the village. In some few cases it is taken into the houses.

The average daily yield has been estimated at 42,249 gallons and about 100 houses are supplied. The quality is good.

Dunstone. The village has a good supply of good water which is obtained from springs at a considerable level above the houses. It is piped to a small balancing reservoir. A new agreement is being prepared by which the quantity of water will be increased and a better distribution ensured.

REVELSTOKE.

Noss Mayo is supplied with water obtained from the high ground above the village. The supply is good and constant, and reaches the villagers through stand pipes.

No estimate of the yield has been made but it is ample.

The remainder of the District is supplied from various small sources—either from wells provided with pumps, or from small springs piped to stand pipes. Of these **Brixton Village** and **Ermington Village** are chiefly in need of improved supplies.

SEWAGE AND ITS DISPOSAL. Various methods are used in different parts of the District—in some parts the sewage is taken direct to the tidal waters ; in others simple deposit tanks are used and the effluent is sent on to the land for irrigation purposes, and in other parts there are septic tanks and coke filters from which the effluent is either disposed of on the adjoining land or finds its way into streams.

One area—viz., Crown Hill and St. Budeaux is drained into the Devonport System and the sewage is ultimately dealt with at the Camel's Head sewage works. The method in use in each particular area is described in the paragraph relating to each particular parish. A great deal of work has been done during recent years in improving the drainage of the district and the old fashioned cess-pit arrangements are

being gradually abolished. The actual work accomplished during the past year is detailed under the various sections in the following pages.

SCAVENGING. In the more populous areas in the district a house to house collection of refuse is carried out by various Contractors who are under contract to dispose of it satisfactorily.

INHABITED HOUSES IN THE DISTRICT, OCCUPATION OF THE INHABITANTS.

At the 1901 census the number of houses returned as inhabited was 4,016, of which 2,357 were in the North District, and 1,659 in the Southern. Since then, 27 were built in 1902 ; 29 in 1903 ; 31 in 1904 ; 25 in 1905 ; 65 in 1906 ; 26 in 1907 ; 46 during 1908 ; 12 in 1909 ; 33 in 1910 ; 19 in 1911 ; and 11 in 1912.

The Census of 1911 proved that there are now 4,704 separate tenements, giving an average of 4·55 per house.

Of the 11 new houses occupied during the year, 10 are in the North District, and 1 in the South. There are 3 in Compton Gifford, 4 in Plympton St. Mary, 3 in St. Budeaux, and 1 in Brixton. It is probable that 1913 will see a larger number built as the number of plans submitted and approved during 1912 was 55.

OCCUPATION OF THE INHABITANTS :—

The general majority of the inhabitants are engaged in agricultural work. In the parishes of Plympton St. Mary, Cornwood, and Shaugh, a large number are employed at the Clay Works ; whilst in the parishes of Plymstock, Newton Ferrers, and Revelstoke many follow a seafaring life, either as fishermen or sailors. There are, of course, a considerable number engaged in the ordinary occupations which are usually

found in communities—e.g., Carpenters, Masons, etc. One Furniture Factory employs about 50 men, whilst several are employed at Brick-making, and many men living on the parts surrounding the towns of Plymouth and Devonport find occupation at the Naval Establishment in the latter town. There are quite a number of Naval and Army pensioners in the district.

The only occupation which appears to have a direct influence on the health of the workmen is that of quarrying—for several of these men as they get past middle life develop *Rheumatoid Arthritis*.

VITAL STATISTICS.

For Registration Purposes the district is divided into two sub-districts :—

The North or Plympton containing 10 parishes, and

The South or Yealmpton containing 9 parishes.

During 1909 the parish of Harford was transferred, for Registration Purposes, from the North to the South district.

The population of the whole district, which at the 1901 census was 19,793, and which at the census in April, 1911 was 21,437, is estimated at the middle of 1912 to be 21,800.

The figures shewing acreage, etc., have been taken from the official census return of 1901.

N.B.—The total populations of Eggbuckland, St. Budeaux, and Plymstock include the soldiers resident in the Forts and Barracks in those parishes; that of Plympton St. Mary includes the residents in the Union Workhouse and the House of Rest; and that of Plympton St. Maurice those residing in Plympton House Asylum. Plympton St. Mary includes the ecclesiastical parish of Sparkwell. Plymstock includes the ecclesiastical parish of Hooe. Ermington does not include the Urban district of Ivybridge.

NORTH SUB-DISTRICT.	AREA IN STATUTE ACRES.			1911 Inhabited Tenements or separate Occupiers.	POPULATION.						Middle of 1912.
					1901.			1911.			
	Land.	Inland Water.	Total.		Total.	Males.	Females.	Total.	Males.	Females.		Estimated Total.
Bickleigh -	2359	11	2370	71	296	142	154	309	163	146	315
Compton Gifford -	167	—	167	87	271	120	151	358	144	214	385
Cornwood -	10087	28	10115	232	1003	505	498	1056	539	517	1070
Egguckland -	3265	10	3275	272	1285	804	481	2076	1587	489	2170
Plympton St. Maurice -	232	—	232	265	1117	483	634	1103	508	595	1100
Plympton St. Mary -	10353	38	10391	897	3837	1756	2081	3940	1818	2122	3985
St. Budeaux -	1731	—	1731	365	1766	899	867	1712	874	838	1750
Shaugh Prior -	8837	25	8862	177	783	423	360	761	424	337	770
Tamerton Folliott -	4789	1	4790	260	1102	535	567	1076	486	590	1075
Weston Peverell -	701	—	701	34	198	94	104	186	78	108	180
Total North	42521	113	42634	2660	11658	5761	5897	12577	6621	5956	12800

SOUTH SUB-DISTRICT.

Brixton	-	3124	1	3125	158	658	324	334	674	342	332	680
Ermington	-	4928	16	4944	205	847	412	435	842	381	461	840
Harford	-	3318	12	3330	26	137	67	70	127	62	65	125
Holbeton	-	4627	8	4635	194	850	401	449	795	387	408	790
Newton Ferrers	-	3326	1	3327	175	611	293	318	742	338	404	755
Plymstock	-	3556	7	3563	867	3195	1597	1598	3857	1956	1901	3985
Revelstoke	-	1544	—	1544	97	405	206	199	400	204	196	395
Wembury	-	3131	2	3133	111	501	253	248	522	285	237	525
Yealmpton	-	3177	14	3191	211	931	464	467	901	429	472	905
Total South	-	30731	61	30792	2044	8135	4017	4118	8860	4384	4476	9000
Total North	-	42521	113	42634	2660	11658	5761	5897	12577	6621	5956	12800
Total Whole District		73252	174	73426	4704	19793	9778	10015	21437	11005	10432	21800

BIRTHS AND BIRTH RATES.

The following births were registered or transferred to this district in 1912 :—

	Total.	1911	1910	1909	1908	1907
North Sub-district	246	241	263	255	258	280
South Sub-district	163	180	173	157	186	200
Whole district	409	421	436	412	444	480

Of the Births 10 were illegitimate.

This gives a birth rate for the **North** of **19.16** per **1000** as compared with—

19.12 in 1911 ; 21.02 in 1910 ; 20.53 in 1909 ; 20.93 in 1908 ;
 22.89 in 1907 ; 24.62 in 1906 ; 22.24 in 1905 ; 22.83 in 1904 ;
 23.93 in 1903 ; 22.76 in 1902 ; 25.07 in 1901 ; 23.28 in 1900 ;
 25.17 in 1899 ; 27.5 in 1898 ; 30.31 in 1897 ; 28.18 in 1896 ;
 29.16 in 1895 ; 25.65 in 1894 ; 27.71 in 1893 ; 25.89 in 1892 ;

For the **South** the rate was **18.11** per **1000** as compared with—

20.27 in 1911 ; 19.53 in 1910 ; 17.97 in 1909 ; 21.47 in 1908 ;
 23.28 in 1907 ; 19.96 in 1906 ; 23.93 in 1905 ; 21.74 in 1904 ;
 24.22 in 1903 ; 20.30 in 1902 ; 21.82 in 1901 ; 24.2 in 1900 ;
 22.17 in 1899 ; 24.83 in 1898 ; 23.65 in 1897 ; 24.07 in 1896 ;
 24.38 in 1895 ; 23.32 in 1894 ; 27.29 in 1893 ; 26.83 in 1892.

For the **Whole** district the rate was **18.76** per **1000** as compared with—

19.60 in 1911 ; 20.45 in 1910 ; 19.47 in 1909 ; 21.15 in 1908 ;
 23.05 in 1907 ; 22.70 in 1906 ; 22.93 in 1905 ; 22.38 in 1904 ;
 24.50 in 1903 ; 21.75 in 1902 ; 23.74 in 1901 ; 23.62 in 1900 ;
 23.91 in 1899 ; 26.56 in 1898 ; 27.88 in 1897 ; 26.73 in 1896 ;
 27.75 in 1895 ; 24.84 in 1894 ; 27.55 in 1893 ; 26.25 in 1892.

The average for the last ten years is 21.56.

The birth rate for the whole of Rural England and Wales during 1912 was 22.6.

MARRIAGE RATE.

During the year 183 marriages were registered. This is five less than last year.

The marriage rate for this year (or persons married per 1000 of the population) for the district is **16.78** per **1000** as compared with—

13.87 in 1911 ; 14.45 in 1910 ; 15.5 in 1909 ; 15.15 in 1908 ;
15.17 in 1907 ; 15.39 in 1906 ; 15.51 in 1905 ; 14.26 in 1904 ;
13.58 in 1903 ; 10.68 in 1902 ; 11.79 in 1901 ; 11.83 in 1900 ;
11.32 in 1899 ; 11.37 in 1898 ; 12.58 in 1897 ; 15.47 in 1896 ;
10.96 in 1895 ; 13 in 1894 ; 12.01 in 1893 ; and 12.1 in 1892.

DEATHS AND DEATH RATE.

The total deaths registered as taking place within the district in 1912 were as follows—

	Total	1911	1910	1909	1908	1907
North Sub-district	139	174	156	164	144	143
South Sub-district	91	122	112	85	119	113
Whole district	230	296	268	249	263	256

Recorded death rate per 1,000 based on above figures—
1912.

North Sub-district	10.87
South Sub-district	10.11
Whole district	10.55

The average rate for the preceding 10 years was **12.54**.

CORRECTED DEATH RATES.

Of the deaths registered in the North sub-districts, 25 occurred in the following institutions—

Plympton St. Mary Union Workhouse ...	20
Plympton House Asylum	3
Mount Edgcumbe Ship Hospital	2
	<hr/>
	25

Of these 25 there were 11 of persons not belonging to the district, and the deaths of 2 non-residents occurred at Egguckland and Cornwood.

In the South sub-district 4 deaths of non-residents were registered.

20 deaths of residents occurred outside the district, of whom 9 belonged to the North Sub-district and 11 to the South. Of these 6 died in the County Asylum, Exminster; 6 in Hospitals and 8 in private houses outside the district.

After making allowance for the foregoing, the **corrected death** rates, calculated on the deaths of residents only, are as follows—

North	1912	1911	1910	1909	1908	1907	1906	1905
Sub-district	10.88	14.20	12.23	12.88	11.84	12.01	11.20	13.44
South	10.77	15.20	12.71	9.73	13.97	13.50	13.03	12.20
Whole dist.	10.82	14.57	12.43	11.58	12.72	12.63	11.95	12.93

The death rate for Rural England and Wales in 1912 was 12.1.

The corrected death rates for the respective parishes are as follows, but much relative importance cannot be attached to them, as the respective populations are too small to afford statistics of any great value :—

		1912			1912
Harford	...	0.00	Brixton	...	10.76
Wembury	...	1.90	St. Budeaux	...	10.80
Compton	...	2.60	Plympton		
Bickleigh	...	2.85	St. Maurice	...	10.90
Egguckland	...	5.53	Weston Peverell	...	11.11
Shaugh Prior	...	7.79	Yealmpton	...	12.15
Plymstock	...	10.03	Plympton St. Mary		13.80
Holbeton	...	10.12	Revelstoke	...	15.18
Cornwood	...	10.28	Tamerton Folliott		17.68
Newton Ferrers	...	10.59	Ermington	...	19.04

The deaths belonging to the district were distributed throughout the year as follows :—

	North Sub. District.			South Sub. District.			Whole District.		
	Under 5	Over 5	Total	Under 5	Over 5	Total	Under 5	Over 5	Total
1st quarter	8	36	44	5	33	38	13	69	82
2nd quarter	6	30	36	—	26	26	6	56	62
3rd quarter	5	18	23	2	14	16	7	32	39
4th quarter	11	24	35	2	16	18	13	40	53
Whole year	30	108	138	9	89	98	39	197	236

CLASSIFICATION OF CAUSES OF DEATH

(See also Table IV.)

1912.

7 chief	Nth Sub. Sth Sub. District District		Total.	1911	1910	1909	1908	1907	1906
Zymotic Diseases - -	4	1	5	25	24	10	10	21	23
*Phthisis -	10	7	17	22	17	23	18	9	11
Cancer - - - - -	11	8	19	21	21	24	16	23	8
Heart - - - - -	19	13	32	44	36	27	21	33	29
†Respiratory System Excluding Phthisis	20	18	38	45	36	38	55	42	29
Nervous System - -	11	10	21	24	21	32	32	31	23
Injuries & Suicide -	9	3	12	15	11	9	8	11	17
Old Age - - - - -	14	14	28	52	37	33	45	33	50
All other causes - -	40	24	64	65	62	49	62	60	57
Total - - -	138	98	236	313	265	245	267	263	247

* See Notes on Tuberculosis.

† Includes deaths from Influenza.

DEATHS FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES.

		North South		Total	1911	1910	1909	1908	1907	1906	1905
		Sub-Dist.	Sub-Dist.								
The Seven Principal Zymotic Diseases.	Small Pox	0	0	0	0	0	0	0	0	0	0
	Measles	1	0	1	4	9	5	0	1	4	2
	Scarlet Fever	0	0	0	0	0	1	0	2	6	2
	Whooping Cough	3	0	3	2	9	0	5	7	4	1
	Diphtheria	0	0	0	5	3	0	1	6	6	2
	Enteric Fever	0	1	1	0	1	1	1	1	1	3
	Diarrhœa	0	0	0	14	2	3	3	4	2	7
		4	1	5	25	24	10	10	21	23	17
Other Zymotic Diseases		0	0	5	5	3	4	0	3	0	1
Including Epidemic Influenza)											
Total		4	1	10	30	27	14	10	24	23	18

The " seven principal " Zymotic Diseases caused 5 deaths and this gives a Zymotic Death Rate of **0.22** as compared with :

1911	1910	1909	1908	1907	1906	1905	1904	1903
1.16	1.12	0.47	0.47	1.00	1.11	0.82	0.93	1.33

The rate for Rural England and Wales in 1912 is not yet published.

DEATHS FROM ALL CAUSES AT VARIOUS AGE PERIODS.

	1912			1911	1910	1909	1908	1907	1906
	North sub-district	South sub-district	Whole District						
Under 1 year	25	7	32	47	36	37	38	46	37
1 year and under 5 years	5	2	7	20	22	10	13	21	20
5 „ 15 „	3	4	7	13	10	7	7	16	12
15 „ 25 „	7	4	11	18	14	15	9	8	8
25 „ 65 „	64	33	97	75	81	78	79	67	66
65 and upwards	34	48	82	140	102	98	121	105	105
Totals	138	98	236	313	265	245	267	263	248

Of the deaths over 65 belonging to the District there were :—

1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901
40 between											
70 and 80	68	47	41	56	46	46	54	47	46	44	42
29 between											
80 and 90	29	29	27	41	31	31	29	29	34	36	31
‡ 6 of 90 & over	†10	§5	*8	5	4	5	5	2	3	0	4

* Of these one was 97, one 98, and one 101 years old.

† Of these two were 95, one 96, and one 98 years old.

‡ Of these one was 99 years old.

§ Of these one was 100 years old.

Infant Mortality, or deaths of infants under one year—

This is estimated at a ratio per 1000 births registered during the year ; and as these numbered 409 the infant mortality was **78.23** per **1000**.

1911	1910	1909	1908	1907	1906	1905	1904	1903	1902
111.63	82.56	89.80	85.58	93.75	78.88	89.36	118.68	105.15	91.95

The rate for Rural England and Wales during 1912 was **86**.

The year has been marked by the following :—

The Birth Rate is slightly lower than that of last year, it has fallen 0.84 per 1000. This is not much but it must be really compared with the average of the last ten years—when the fall is seen to be 2.55 per 1000.

It will be curious to note whether the operation of the National Insurance Act and the established Maternity benefit will have any effect on the Birth Rate. I fear not, for the knowledge of prevention is widely prevalent and there is a terrible disinclination to face the responsibilities of parent-hood.

Infant Mortality.—There is a very gratifying fall in this index of the sanitary administration of the district, for out of the 409 births registered during the year only 32 died, i.e., a rate of 78.23 per 1000 births. This is the lowest rate I have had to record during my tenure of office, and it is 23.40 below that of 1911. The absence of Epidemic disease and especially of Infantile Diarrhœa was the most important factor in this fall. The fact that not one death was attributed to Diarrhœa is a remarkable proof of the healthiness of a wet Summer. The figures given under the rainfall table shew that we had exceptionally heavy falls of rain at intervals and the enormous amount of water so available for “flushing” purposes no doubt prevented the dissemination of infective germs by means of dust.

The chief causes of the deaths of the 32 babies were :—

Premature Birth and Congenital Malformations...	7
Debility from Birth and Marasmus	10
Diseases of the Lungs	7
Whooping Cough	3

Of the 32 who died 4 were illegitimate, and in one of these cases the cause was wilful murder.

Death Rate.—Here I am also pleased to say that the rate is a “record” one. It was 10.82 per 1000 and that was 3.75 below that of 1911. Of course this is largely due to the reduction in the Infantile death rate, but there was another important factor in the largely reduced number of deaths over the age of 65. In 1911 the number was 140 whilst in 1912 it was only 82.

Diphtheria.—The number of cases notified during the year was 20, that is a very much smaller number than in 1911 and less than half the average number during the past 5 years. This is coincident with the much more prompt and careful investigation into each case which was begun early in the year. I have given much more time to such work and it is my custom now to visit each case at once, and also to visit and inspect the children in the particular school which the child has been attending. Not only this, but I have made it a rule to prevent any child who has been notified returning to school until I have proved it free from infection by bacteriological examination. The wisdom of this has been shewn on several occasions, and in two particular cases I was able to prove that the infection remained long after all clinical symptoms of the disease had disappeared. These two cases gave me much trouble and both had to be kept away from school for two months before I obtained negative swabs from their throats.

The 20 cases were distributed as follows—

January	... 2—Both in Tamerton Folliott and were the last of the 1911 epidemic.
February	... 2—1 in Plympton St. Mary and 1 in Plymstock.
March	... 1—1 in Plympton St. Mary.
May	... 2—1 in St. Budeaux and 1 in Tamerton Folliott.
September	1—1 in St. Budeaux.
October	... 2—1 in Plympton St. Mary and 1 in Plympton St. Maurice.
November	5—4 in Plympton St. Mary and 1 in Plympton St. Maurice.
December	... 5—4 in Plympton St. Mary and 1 in Plympton St. Maurice.

The Parochial Distribution was :—

Tamerton Folliott	...	3	viz.	January, 2 ; May, 1.
St. Budeaux	...	2	„	May, 1 ; September, 1.
Plymstock	...	1	„	February.
Plympton St. Mary	...	11	„	February, 1 ; March, 1 ; October, 1 ; November, 4 ; December, 4.
Plympton St. Maurice		3	..	October, 1 ; November, 1 ; December, 1.

20

Ages of the cases ranged from $1\frac{1}{2}$ years to 23, and were as follows :—

	1 year and under 2 years	...	...	1
	2 years	...	...	1
	{ 5 years 1 ; 6 years 4 ; 7 years 3 }			
School	{ 8 years 2 ; 10 years 1 ; 11 years 1 }			16
Ages	{ 12 years 4 ;			
	16 years	...	...	1
	23 years	...	...	1
				—
				20
				—

The number of Infected houses was 18.

In 17 houses there was a single case	...	17
In 1 house there were 3 cases	...	3
		—
		20
		—

Of the cases two were removed to Hospital—one to the Plymouth Borough Hospital, and the other to the Mount Edgumbe Ship Cottage Hospital

At the time of writing this report, February 8th, 1912, I am glad to say that the district is quite free from Diphtheria.

Puerperal Fever.—Only one case was notified. This case was probably due to auto-infection as I could find no cause external to the patient. The nurse in attendance was kept from attending any other case for a month and her clothes and the patient's house thoroughly disinfected. The patient recovered after a long illness.

Erysipelas.—Two cases were reported both of which were mild ones.

Acute Anterior Poliomyelitis.—One case was reported in the parish of Cornwood early in January. I visited the case and made all necessary investigations but was unable to trace any cause. The child gradually improved and the course of its illness was such as to render the original diagnosis somewhat doubtful.

Enteric Fever.—Two cases were reported—neither of which were fatal. Although this is very gratifying when compared with the number of the preceding 5 years which were respectively 7, 9, 5, 6, and 7, yet I shall not feel satisfied until this disease is abolished* It is one of the preventable diseases and is frequently taken as an index of the sanitary administration of a district. The great improvements which have been made during recent years in the water supply and drainage of the district must be considered as one of the causes in the reduction of the incidence of this disease.

Of the two cases reported—one occurred in Roborough and the other in Eggbuckland. In neither case could I find any contamination of the water supply, but as one of the cases occurred whilst some old and bad drains were being replaced by new ones, it is probable that the

* The average No. of cases for 1896 to 1902 was 21 per year.

“ “ “ 1903 to 1911 “ 7 “

The actual number in 1912 was 2

and it is the lowest I have had the pleasure of recording.

disturbance of the sewage-sodden soil may have given origin to this case.

One of the cases was removed to the Borough of Plymouth Isolation Hospital and the other was nursed at home.

Continued Fever.—One case was reported. It was probably Influenzal in origin, and from the previous history of the case obtained from a London Doctor I was able to exclude any insanitary cause of the fever.

Scarlet Fever.—59 cases were notified during the year as compared with 33, 16, 59, 15, and 42 in the preceding 5 years.

They were distributed as follows :—

January	5 viz.,	1 in Shaugh Prior, 1 in St. Budeaux, 3 in Eggbuckland.
February	1 „	1 in Eggbuckland.
March	1 „	1 in Compton Gifford.
June	3 „	1 in St. Budeaux, and 2 in Plympton St. Mary.
August	1 „	1 in Plymstock.
September	17 „	1 in Newton Ferrers, 1 in Tamerton Folliott, 2 in Plympton St. Mary, and 13 in Holbeton.
October	10 „	1 in Plymstock, 3 in Holbeton, and 6 in Newton Ferrers.
November	8 „	1 in Holbeton, 2 in Newton Ferrers, and 5 in St. Budeaux.
December	13 „	3 in Eggbuckland, and 10 in St. Budeaux.

The Parochial Distribution :—

Shaugh Prior	1	viz., 1 in January.
St. Budeaux	17	„ 1 in January ; 1 in June ; 5 in November, and 10 in December.
Eggbuckland	7	„ 3 in January ; 1 in February, and 3 in December.
Compton Gifford	1	„ 1 in March.
P. St. Mary	4	„ 2 in June, and 2 in September.
Plymstock	2	„ 1 in August and 1 in October.
Holbeton	17	„ 13 in September ; 3 in October, and 1 in November.
Newton Ferrers	9	„ 1 in September ; 6 in October, and 2 in November.
Tamerton Folliott	1	„ 1 in September.

 59

Ages of cases ranged from 1 to 45 years—and were as follows :—

	1 year	1	2 years	4	3 years	6	...	11
School Ages	$\left\{ \begin{array}{l} 4 \text{ years } 8 \\ 7 \text{ years } 5 \\ 10 \text{ years } 2 \\ 13 \text{ years } 1 \\ 17 \text{ years } 1 \\ 21 \text{ years } 1 \\ 45 \text{ years } 1 \end{array} \right. \left\{ \begin{array}{l} 5 \text{ years } 6 \\ 8 \text{ years } 6 \\ 11 \text{ years } 4 \\ 14 \text{ years } 1 \\ 19 \text{ years } 2 \\ 25 \text{ years } 1 \end{array} \right. \left\{ \begin{array}{l} 6 \text{ years } 3 \\ 9 \text{ years } 2 \\ 12 \text{ years } 1 \\ 15 \text{ years } 1 \\ 20 \text{ years } 1 \\ 28 \text{ years } 1 \end{array} \right. \dots$							
								4
								3
								1

 59

The number of infected houses was :—

In 21 houses there was a single case	...	21
In 10 houses there were 2 cases	... ..	20
In 2 houses there were 3 cases	... ..	6
In 3 houses there were 4 cases	... ..	12
		—
		59
		—

In the majority of houses in which there were multiple cases the outbreak was simultaneous, but in some of them the cases were consecutive and due to imperfect isolation.

Of the 59 cases—5 were removed to Hospital.

Scarlet Fever is a disease in which the symptoms are sometimes so mild that careless parents occasionally do not realise the condition until it is too late to prevent the spread of infection. The distribution of the cases this year afforded good examples of the foregoing, and this was especially marked in the Holbeton Epidemic where I detected cases in the peeling stage actually attending school. From enquiries I made I have little doubt that this epidemic arose because of this fact, and even after the school had been closed for 3 weeks I found two children sent to the re-opening whilst still in the infective stage. This was so glaring a piece of negligence and in such direct opposition to the clear directions I had given that I advised the Council to prosecute the parents. This was done at the Ivybridge Petty Sessions, and a salutary penalty inflicted. I hope the lesson will not be thrown away.

Small Pox.—No case occurred.

Vaccination.—I am sorry to say that there is still an increasing neglect of this important preventive of Small Pox, and this in spite of the fact that the almost universal opinion of Medical men throughout the world as to the efficacy of its power to prevent and mitigate Small Pox is based upon actual experience both amongst civilised and uncivilised communities. Even those Medical men (and they are few) who see reasons for objecting to Compulsory Vaccination in infancy are strong upholders of Vaccination and revaccination when brought face to face with a threatened outbreak of Small Pox—for they know that Small Pox does not and cannot spread amongst an efficiently vaccinated population. The most efficiently vaccinated people in Great Britain are the Doctors and Nurses who treat Small Pox cases and no argument in favour of Vaccination is so impregnable as the fact that these Doctors and Nurses live amongst all types of Small Pox with remarkable freedom from infection. We are passing through a phase of national life in which legislation seems to be influenced much more by the “opinions” of the majority than by the “facts” of the minority, and although Medical men continue to do what they believe to be their duty to the public by emphatically protesting against the neglect of Vaccination, yet their warnings are not only unheeded but are met by gibes, sneers and inuendos of financial self-interest. The truth is that the Medical profession in upholding and insisting upon the value of Vaccination is acting absolutely against its own financial interest, for one epidemic of Small Pox would bring more money to the profession than many years of Vaccination fees. We shall, however, continue to preach Vaccination, and we are content to leave the renewed proof of our convictions to future events, knowing full well that we can face Small Pox with confident reliance on the protection we have obtained through Vaccination. Then also will be the time in which will be put to the proof the assertions of the Anti-vaccinators, and they will again probably do—as they have done before—throw their opinions to the winds and seek the aid of the Public

Vaccinator!! and at any rate we may be quite sure of one thing, and that is—they will not be found amongst those who will fearlessly minister to the unfortunate patients who have been deluded by them to neglect the most scientifically based preventive of any known disease.

Tuberculosis.—During the year 36 cases of Phthisis were notified—distributed as follows:—

Plympton St. Mary, 11; Ermington, 5; Plymstock, 4; Plympton St. Maurice, 3; Wembury, 3; Yealmpton, 2; and one each in Tamerton, Cornwood, Eggbuckland, Revelstoke, Compton Gifford, Holbeton, Newton Ferrers, and Brixton—of these 13 died during the year, two left the district and have been lost sight of—of the remaining 21 alive at the end of the year there are 11 in whom the disease is sufficiently arrested to allow of their usual occupation being followed, whilst there are 9 who are either worse or have not improved at all.

The actual number of deaths during the year was 17, i.e., the 13 referred to above and 4 who were notified in previous years—of these 10 were in the North District and 7 in the South, and belong to the following parishes:—7 to Plympton St. Mary (of whom one died in the County Asylum; 4 to Plymstock; 3 to Ermington; 1 to Plympton St. Maurice, and 2 to Eggbuckland (of whom one was a soldier and who died in the military Hospital at Devonport). In addition to the above there were 3 deaths assigned to general Tuberculosis (2 in Plymstock and one in Shaugh Prior), and 5 to Tubercular Meningitis—there being one in each of the parishes of Plymstock, Eggbuckland, Revelstoke, Ermington and Holbeton.

The actual number of deaths therefore due to Tuberculosis was 25, the ages ranged from 2 years to 57.

Of the 36 notified, 4 received Sanatorium treatment, 2 of these were treated at Didworthy, one of the 4 is dead,

one is still under treatment, one was discharged as incurable, and the other is reported cured. This one, however, was sent in the earliest stages of the disease.

The relative merits of Sanatorium and Domiciliary treatment are still undecided—but one thing is certain about both and that is that the very early cases are curable by both methods. Where pure air, good food and proper medical supervision are obtainable at home I do not see that the increased expenditure entailed by Sanatorium treatment is always justified, but it must be remembered that for a large number of the labouring classes the desirable combination of the three essentials is comparatively rarely available, and hence arises the necessity for Sanatoria for some cases. The suggested wholesale treatment of Tuberculosis cases in specially built Sanatoria—or first-class hotels as they were called by a prominent politician—has been shewn to be so expensive as to be almost beyond the range of practical politics and it is therefore gratifying to find that great efforts are now being made to deal with the disease in the more immediately practical methods of Treatment at Home, at Tuberculosis dispensaries and in temporary shelters. The appointment of Tuberculosis officers who will give their whole time to this work will do much towards effective treatment and they will have as one of their chief weapons the potent “remedy,” Tuberculin.

The District Council and the local M.O.H. are becoming, as time goes on, more important factors in the National Crusade against Tuberculosis, for the various orders and regulations issued by the Local Government Board from time to time, demand increasing control and investigation into all the conditions from which Tuberculosis arises. The latest development in this direction is the compulsory notification of all cases of Tubercular disease in whatever part of the body it shews itself. This is a serious attempt to fight the disease as it appears in Children, for they are especially prone to shew signs of the disease in the abdo-

men, the glands, and the bones. In addition to this notification to the M.O.H. (a copy of which has to be regularly forwarded to the County Council) there has been instituted an extension of Home Treatment. For this purpose the County Council of Devon have appointed three Medical men of special experience in the work who will visit the cases kept at home and in conjunction with the M.O.H. and the doctor in attendance decide on the particular line of treatment to be adopted.

Whooping Cough.—This disease was not very prevalent, but it caused 3 deaths—all of infants under one year old—of these two were in Plympton St. Mary, and one in Shaugh Prior. Epidemics occurred at Lee Moor, Plympton S. Mary, and Newton Ferrers.

Measles.—One death was due to this in Plympton St. Maurice. Epidemics of mild character occurred at Plympton, Plymstock, Shaugh Prior, and Cornwood.

Diarrhoea.—For the first time for many years no death was due to this. The wet Autumn was no doubt the important factor in the prevention of any epidemic of this disease.

Anthrax.—One case was reported in Eggbuckland. The carcase was destroyed by fire, and all necessary measures of disinfection of the premises carried out by the Police.

Cancer.—Nineteen deaths were due to this disease as compared with 21, 21, 24, 16, and 23 during the preceding 5 years.

They were distributed as follows :—

11 in the North District, viz., 3 in Plympton St. Mary ; 1 in Plympton St. Maurice ; 2 each in Cornwood, Tamerton

Folliot and one each Egguckland and in Shaugh Prior and St. Budeaux.

8 in the South District, viz., 4 in Ermington ; 3 in Plymstock, and 1 in Yealmpton.

The disease manifested itself in the following parts of the body—1 in the Skin, 2 in the Lip, 3 in the Stomach, 1 in the Liver, 1 in the Pancreas, 5 in the Bowels, 4 in the Uterus, 1 in the Prostate, and 1 in the Lungs.

TABLE I.—Vital Statistics of WHOLE DISTRICT during 1912 and previous Years.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.			TRANSFERABLE DEATHS.†		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un- corrected Number.	Nett.		Number.	Rate.	Of Non- Residents registered in the District. 8	Of Resi- dents not registered in the District. 9	Under 1 year of Age		At all ages.		
			Number.	Rate.					Number.	Rate per 1000 Nett Births.	Number.	Rate.	
1	2	3	4	5	6	7			10	11	12	13	
1907	20820	480	—	23·05	256	12·29	4	11	45	93·75	263	12·63	
1908	20985	444	—	21·15	263	12·53	3	7	38	85·58	267	12·72	
1909	21150	412	—	19·47	249	11·77	9	5	37	89·80	245	11·58	
1910	21314	436	—	20·45	268	12·57	9	6	36	82·56	265	12·43	
1911	21478	421	—	19·60	296	13·78	4	21	47	111·63	313	14·57	
1912	21800	400	409	18·76	230	10·55	17	23	32	78·23	236	10·82	

NOTE.—The deaths included in Column 6 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 6, corrected by the subtraction of the number in Column 8 and the addition of the number in Column 9.

* "Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

At Census of 1911.—Area of District in Acres (exclusive of area covered by water) 73,252.

Total Population at all ages, 21,437. Number of inhabited houses, 4,704. Average number of persons per house, 4·55.

TABLE II.
Cases of Infectious Diseases Notified during the Year 1912.

Notifiable Diseases.	Cases notified in the whole District.								Total cases notified in each Locality.		No. of cases removed to Hospital from each locality.	
	At all ages.	At Ages—Years.										
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	Plympton or North.	Yealmt'n or South.	Plympton or North.	Yealmt'n or South.
Small Pox ...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	..	...	...	...	...	...	...	...	...	..	...
Diphtheria (including Membranous Group)	20	2	16	2	...	..	...	19	1	2	...
Erysipelas ...	2	..	...	1	1	...	...	...	2	...	...
Scarlet Fever ...	59	19	31	6	2	1	...	31	28	10	...	
Typhus Fever ...	..	..	...	...	...	...	...	...	...	..	...
Enteric Fever ...	2	...	...	1	1	...	...	2	...	1	...
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	1	...	...	1	...	...	...	...	1	...	...
Puerperal Fever ...	1	...	...	...	1	...	...	..	1	...	...
Poliomyelitis ...	1	...	1	...	...	...	...	1	...	...	...
Pulmonary Tuberculosis	36	...	3	5	18	10	...	18	18	1	3	
TOTALS ...	122	21	51	16	23	11	...	71	51	14	3	

Isolation Hospitals used—The Plympton St. Mary Small Pox Hospital, Lee Mill, Plympton.
The Infectious Diseases Hospital of the Plymouth Town Council
Mt. Edgcombe Training Ship Hospital.
Didworthy Sanatorium.

TABLE III.

Causes of, and Ages at, Death during the Year, 1912.

CAUSES OF DEATH.		Net deaths at the subjoined ages of "Residents" whether occurring within or without the District.										Total Deaths whether of "Residents" or "Non-Residents" in the District
		All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.		
I		2	3	4	5	6	7	8	9	10	11	
All causes	{ Certified ...	236	32	4	3	7	11	27	70	82	25	
	{ Uncertified	...	...	...	...	...	...	...	...	...	...
Enteric Fever	...	1	...	...	...	...	...	1	...	...	...
Small Pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	1	...	1	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	3	3	...	...	...	...	...	...	...	...
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	4	...	...	...	...	...	1	1	2	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis)	...	17	...	...	...	...	4	6	7	...	1
Tuberculous Meningitis	...	5	...	...	...	4	1	...	...	...	1
Other Tuberculous Diseases	...	3	...	...	2	...	...	...	1	...	1
Cancer, malignant disease	...	19	...	...	...	...	...	3	8	8	...
Rheumatic Fever	...	1	...	...	...	1	...	...	...	...	1
Meningitis	...	3	1	1	...	...	...	...	1	...	...
Organic Heart Disease	...	32	...	...	...	...	2	...	13	17	4

TABLE III. (continued)

INFANTILE MORTALITY DURING THE YEAR 1912.

INFANTILE MORTALITY DURING THE YEAR 1912.

Nett Deaths from stated causes at various Ages under One Year of Age.

[illegible]

TABLE IV —continued.

Convulsions	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	...	...	...	...	...	...	1	...	...	1	...	1	3
Pneumonia (all forms)	...	...	...	...	...	...	...	...	...	...	...	3	1	...	4
{ Diarrhoea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gastritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injury at birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Congenital Malformations	...	...	...	...	...	...	...	1	...	...	...	1	...	...	2
Premature birth	...	...	...	...	...	...	...	5	...	...	...	...	...	...	5
Atrophy, Debility and Marasmus	...	...	...	...	...	...	...	2	3	1	1	2	...	...	10
Other causes	...	...	...	...	...	...	...	1	1	...	...	2	...	...	2
								9	4	1	3	17	4	1	32

Nett Births in the year { legitimate 399
 { illegitimate 10

Nett Deaths in the year of { legitimate infants 28
 { illegitimate infants 4

TABLE V.

Shewing the number of Deaths from the principal Infectious Diseases (excluding Phthisis) in the District from 1896 up to and including 1912.

DISEASE.	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	Annual Rate per 1000, 1912.
Small Pox ..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	·0
Measles ..	27	3	13	5	0	3	2	15	2	2	4	1	0	5	9	4	1	·045
Scarlet Fever ..	1	0	1	0	0	0	0	1	1	2	6	2	0	1	0	0	0	·0
Whooping Cough ..	1	5	17	4	1	0	4	5	6	1	4	7	5	0	9	2	3	·137
Diphtheria and Membranous Group	6	1	2	1	5	2	6	1	†3	2	6	6	1	0	3	5	0	·0
Enteric or Typhoid Fever ..	1	0	3	*3	1	†1	0	2	1	†3	1	1	1	††1	1	0	1	·045
Diarrhoea ...	12	13	26	17	11	5	3	3	6	7	2	4	3	3	2	14	0	·0
Other Zymotic Diseases, e.g.: Erysipelas and Puerperal Fever, Epidemic Influenza, Cholera, &c. ...	3	3	0	2	0	0	1	1	0	1	0	3	15	5	3	5	5	·229
Total ...	51	25	62	32	18	11	16	28	19	18	23	24	25	15	27	30	10	

*Of these, two occurred in the Plymouth Borough Hospital.

†This occurred in the Plymouth Borough Hospital.

††This occurred in the Workhouse Infirmary.

‡Of these, one " " " "

TABLE VI.

Quarterly Distribution of Cases of Infectious Diseases with
the Deaths therefrom.

NOTIFIABLE—Cases and Deaths therefrom.

Disease.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Whole Year.	
					Cases	Death
Small Pox ... ..	...	...	...	...	...	...
Cholera... ..	...	...	...	...	...	...
Diphtheria and MembranousCroup	5	2	3	10	20	...
Erysipelas	2	...	...	...	2	...
Scarlet Fever	7	3	18	31	59	...
Typhus Fever ... ..	...	...	...	...	...	...
Enteric Fever	1	1	...	...	2	1
Continued Fever...	...	...	1	...	1	...
Relapsing Fever	...	...	...	...	...	...
Puerperal „ ... ..	...	1	...	...	1	...
Phthisis	21	3	3	9	36	17
Poliomyelitis	1	...	...	...	1	...
Total	37	10	25	50	122	18

NON-NOTIFIABLE—Deaths only.

Measles... ..	...	...	...	...	...	1
Whooping Cough	...	...	...	...	...	3
Diarrhœa ... ..	...	...	...	...	...	...
Influenza ... ..	...	...	...	...	...	4
Total ... ..	...	...	...	...	...	8

INFECTIOUS DISEASES NOTIFICATION ACTS.

Table shewing the Parochial distribution of cases notified under the above Acts, and the Deaths from Notified Diseases.
 The total number printed in large figures, the deaths in small figures.

PARISH.	Polio- myelitis.	Small Pox	Cholera	Diphtheria & Mem. Group.	Erysipelas	Scarlet Fever	Typhus Fever	Enteric or Typhoid Fever	Relapsing Fever.	Continued Fever.	Phthisis,	Puerperal Fever.	Total Notified.	Total Deaths.
Compton	1	...	...	...	...	1	...	2	...
Bickleigh
Cornwood ...	1	...	...	...	...	...	...	...	...	...	1	...	2	...
Eggbuckland	7	...	1	...	...	...	...	8	2
Weston Peverell
Plympton St. Mary	11	...	4	...	...	...	...	12 ⁷	...	27	7
Pl'pton St. Maurice	3	...	...	...	...	...	...	2 ¹	...	5	1
St. Budeaux	2	...	17	...	...	...	...	2	...	21	...
Shaugh	1	...	...	...	...	...	...	1	...
Tamerton Folliott	3	...	1	...	1	...	...	...	...	5	...
Total North ...	1	...	...	19	...	31	..	2	...	...	18¹⁰	..	71	10

South District.

TABLE VIII.
INFECTIOUS DISEASES NOTIFICATION ACTS.

Table shewing the Parochial Distribution of cases notified under the above Acts, and the deaths from the Notified Diseases.

The total number printed in large figures, the deaths in small figures.

Parish	Polio- myelitis.	Small Pox.	Cholera.	Diphth'ia and Mem. Group.	Erysip'las	Scarlet Fever.	Typhus Fever.	Enteric or Typhoid Fever.	Relapsing Fever.	Continu'd Fever.	Phthisis.	Puerperal Fever.	Total Notified.	Total Deaths.
Brixton ...	...	...	...	...	...	...	...	1 ¹	...	...	1	1	2	1
Ermington ...	...	...	...	...	...	...	...	...	...	...	5 ³	...	5	3
Harford ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Holbeton ...	...	...	...	...	...	17	...	...	...	...	1	...	...	...
Newton Ferrers ...	...	...	...	...	2	9	...	...	...	...	1	...	18	...
Plymstock ...	...	...	...	1	...	2	...	...	...	1	4 ⁴	...	12	...
Revelstoke ...	...	...	...	...	...	...	...	...	...	...	1	...	8	4
Wembury ...	...	...	...	...	...	...	...	...	...	...	3	...	1	...
Yealmpton ...	...	...	...	...	...	...	...	...	...	...	2	...	3	...
													2	...
Total South	...	...	...	1	2	28	...	1 ¹	...	1	18 ⁷	1	51	8
Total North	1	...	...	19	..	31	...	2	...	...	18 ¹⁰	..	71	10
Total Whole District	1	...	...	20	2	59	...	2 ¹	...	1	36 ¹⁷	1	122	18

* Notified in 1911.

TABLE IX.

Table showing Parochial Distribution of Deaths, from Zymotic Diseases, Phthisis, and Cancer.

NORTH SUB-DISTRICT.	Small Pox	Cholera	Diph- theria and Mem- brano's Group	Ery- sipelas	Scarlet Fever	Con- tinued Fever	Enteric or Ty- phoid Fever	Relap- sing Fever	Puer- peral Fever	Measles	Diarr- hoea	Whoop- ing Cough	Infl- enza	Total Zy- motic Dis- eases	Phth- isis	Cancer
Bickleigh
Compton
Cornwood	2
Egguckland	2	1
Weston Peterell
Plympton St. Mary	2	..	2	7	3
Plympton St. Maurice	1	..	..	..	1	1	1
St. Budeaux	1
Shaugh	1	..	1	..	1
Tamerton Folliott	2
TOTAL NORTH	1	..	3	..	4	10	11

TABLE X.

Table showing Parochial Distribution of Deaths from Zymotic Diseases, Phthisis, and Cancer—(continued).

SOUTH SUB. DISTRICT.	Small Pox.	Cholera	Diphth- eria & Mem- branous Croup.	Ery- sipelas.	Scarlet Fever.	Con- tinued Fever.	Enteric or Typhoid Fever.	Re- lapsing Fever.	Puer- peral Fever.	Measls	Diarr- hoea.	Whoop- ing Cough.	Influenza.	TOTAL Zy- motic Dis- eases.	Phthisis	Cancer.
Brixton	1	...	...	...	...	...	...	1	...	...
Ermington	3	4
Harford
Holbeton
Newton Ferrers	2	2	...	...
Plymstock	4	3
Revelstoke	2	2	...	...
Wembury
Yealampton	1
Total South	1	...	...	...	...	...	4	5	7	8
Total North	1	...	3	...	4	10	11
Whole District...	1	...	...	1	...	3	4	9	17	19

Midwives Act.—This Act is now administered directly by the County Council, and the inspection of the Midwives is done by women inspectors specially appointed for that purpose. I cannot do other than express my emphatic disapproval of what I believe to be a distinctly retrograde step and one which I believe was taken solely in the interests of the County Nursing Association. From the time of the passing of the Midwives Act until the end of 1911 the inspection of the Midwives in Devon was carried out by the District Medical Officers of Health, and I know of no sufficient reason why such work was removed from their hands ; and at any rate I have good reason for thinking that such a removal will not tend either towards economy or efficiency. The investigation of the origin of the case of Puerperal Fever is still and must remain in the hands of the Medical Officer of Health, and it is surely common sense that such investigation is much more likely to be complete and efficient when it is coupled with the knowledge which the periodical inspection and supervision of the Midwives can alone give.

The necessity of such skilled supervision has been increased rather than lessened by a recent extension of the work of the Midwives and district nurses which has been initiated or sanctioned by the County Council. In my previous report I pointed out that many of the Rural Districts did not provide enough work for the whole time of a midwife and that in spite of the Midwives' Act and regulations, such Midwives were frequently giving their services in the nursing of other cases. The County Council has now adopted a plan by which such nurses are enabled to attend the Chronic Tuberculosis cases and also to act as school nurses. This is exactly what I foreshadowed, but I certainly did not anticipate that such nurses would be free from the direct control and supervision of the District Medical Officer of Health.

Milk Supply.—The district is pre-eminently a milk-producing one, and the demand for milk for the large towns of

Plymouth and Devonport is so great that the whole of the milk from many of the farms is distributed in those towns. There is, in consequence, in some of the villages a difficulty in the smaller householders getting such milk as they require. Generally speaking the milk is of a high quality, and convictions for adulteration or inferior quality are rare. During the past few years the shippens and dairies are shewing considerable improvements and I am sure that the periodic inspections under the Dairies and Milk-shops orders and regulations are doing much good.

The Council retain the services of a leading Veterinary Surgeon to report on the condition of any suspicious cow. During the year his attention had to be called to one such case, but no prosecution was considered necessary.

Factory and Workshops' Act, 1901.—The total number of factories and workshops on the register is now 123—an increase of eight on the previous year. Every one of these has been visited once, and some twice, the total number of inspections being 139. No prosecutions have been necessary. Generally speaking the workshops have been kept in a satisfactory condition, but some of the smaller bakehouses are kept clean with great difficulty, especially those which are not lofty. The standard of cleanliness is however being gradually raised throughout the district. The workshops are classified as follows :—

Bakehouses, 30 ;	Laundries, 14 ;	Saddlers, 5	...	49
Dressmakers & Milliners, 9 ;	Tailors, 4 ;	Painters, 1		14
Carpenters, Wheelwrights, and Coachbuilders			...	20
Blacksmiths, 18 ;	Plumbers, 5		...	23
Brick Works, 2 ;	Flour Mills, 3 ;	Steam Saw Mills, 3		8
Shoemaker, 1 ;	Ropemaker, 1 ;	Maltsters, 2 ;		
Stonemason, 1			...	5
Motor Boat Works, 1 ;	Mineral Water, 1 ;			
Gas Works, 1			...	3
Fish Manure Works			...	1

In one there was deficient ventilation, in 5 the closet accommodation was insanitary, in 5 there was want of whitewash, and in 6 there were other small defects—of these 17 defects 16 were remedied during the year.

Weather and Rainfall during 1912.—For the records of the rainfall I am indebted to Miss Glanville, of Langham Hall ; to R. H. Clay, Esq., of Wembury House ; to the Rev. E. S. Powell, of Holbeton ; to Vere Cholmondeley, Esq., of Leigham ; and to Victor Prigg, Esq., C.E., of Plymouth.

The year has been chiefly remarkable for the excessive and irregular rainfall. The total is higher than it has been for many years past, but there was not the same difference in the number of wet days—*e.g.* in 1907 with a rainfall of 36.25 inches in Plymouth and 226 wet days—in 1912 the rainfall was 47.04 inches with 219 wet days.

The wettest month of the year was August, in which a rainfall of 8.86 inches was recorded in Plymouth, and 10.39 in Ivybridge. In the month 26 wet days were recorded, and on one day over $2\frac{1}{2}$ inches of rain fell. It is a curious fact that this is coincident with a marked absence of diseases of the diarrhœa type and the experience that a wet summer is a healthy one is confirmed.

MONTH.	Total depth in inches.					Greatest fall in 24 hours.										No. of days in which .01" or more rain fell.				
	LH.	W.	H.	L.	P.	LH. Depth.	Date	W. Depth.	Date	H. Depth.	Date	L. Depth.	Date	P. Depth.	Date	LH.	W.	H.	L.	P.
January ...	6.46	4.06	4.79	4.78	3.86	0.69	15	0.62	9	0.69	6	0.85	5	0.72	5		20	19	18	16
February ...	5.68	4.09	4.19	5.19	4.55	0.74	21	0.60	9	0.66	8	0.88	7	0.82	7		16	20	23	22
March ...	7.77	5.81	6.52	6.34	5.58	1.00	14	0.71	15	0.77	15	0.77	14	0.70	14		26	28	28	26
April ...	0.31	0.19	0.51	0.34	0.19	0.11	9	0.08	10	0.22	10	0.22	9	0.08	9		4	4	6	5
May ...	2.04	1.78	2.00	1.76	1.65	0.62	6	0.36	7	0.67	7	0.61	6	0.65	7		11	13	15	12
June ...	6.32	5.05	5.42	5.49	5.02	1.10	11	1.01	3	0.97	3	1.04	27	0.92	2		17	20	23	23
July ...	3.13	1.99	2.09	2.63	2.41	0.61	7	0.50	28	0.55	28	0.67	31	0.66	27		19	17	20	21
August ...	10.39	10.12	8.86	10.76	8.86	1.85	3	2.83	6	1.23	24	2.13	5	1.94	5		27	25	26	26
September ...	1.96	1.71	1.20	1.73	1.99	0.54	30	0.82	29	0.55	30	0.94	29	0.83	28		5	5	5	6
October ...	5.93	5.16	5.85	5.66	4.50	1.80	27	1.37	28	1.46	28	1.70	27	1.51	27		17	18	18	19
November ...	3.85	2.96	2.96	2.98	2.53	0.63	25	0.50	26	0.47	29	0.32	28	0.41	26		17	17	19	18
December ...	8.23	5.96	6.32	7.14	5.90	0.74	9	0.82	28	0.76	10	0.76	9	0.77	9		25	23	24	25
Total 1912 ...	62.07	48.88	50.71	54.60	47.04												204	209	226	219
" 1911 ...	51.99	37.09	39.44	42.51	37.83											176	154	173	166	177
" 1910 ...	61.46	45.35	46.70	—	44.43											229	203	208	—	207
" 1909 ...	49.26	34.00	38.21	—	35.24											182	153	161	—	181
" 1908 ...	41.55	26.56	—	—	31.00											179	162	—	—	189
" 1907 ...	53.58	37.35	—	—	36.25											233	194	—	—	226

L.H.—Langham Hall, Ivybridge.

W.—Wembury House.

H.—Holbeton Vicarage.

L.—Leigham.

P.—Plymouth

Schools and School Inspection.—All children attending public elementary schools are under periodical inspection by special Inspectors acting directly under the County Council. I am still of opinion that the appointment of special officers for this work was an unwise one, and that it would have been better for such work to have been given to the local Medical men who would be immediately available when the schoolmaster wanted skilled advice as to the fitness of a particular child to attend school. At present there is constant friction between the parent and the schoolmaster for the latter insists (through the attendance officer) on getting every possible child to school, whilst the former is often unwilling, and justifiably unwilling to send a child who is not quite well. In my opinion no child should be compelled to go to school who is even a "little bit out of sorts," and the decision on this matter should be given by a Medical man and further this decision should be quickly and easily obtainable and without cost to the parent.

Provision should be made so as to prevent any schoolmaster incurring any financial loss through the absence of any child through sickness. I consider this most important and I am sure many a serious illness would be avoided and an epidemic prevented if parents were instructed to keep any child who shewed any slight signs of illness away from school until such child was declared fit to attend by the local Medical man officially appointed for that purpose. The record of the health of any particular child would be much more complete and valuable if the work were done as I suggest, than it is at present by officials who can only visit the schools at long intervals, such intervals being in some cases so long as three months and sometimes—if I am rightly informed—so long as six months !

There are 31 public schools in the district with an average attendance of about 3000 scholars. The schools vary much in size, for whilst one has an average of about

30, another has over 300. The sanitary conditions are also very varied. I am glad to say that the water supply of the great majority is good, but in some cases it is insufficient to allow of automatically flushed water closets being erected. In these cases hand flushing has to be done or bucket closets used. The sanitary accommodation at Newton Ferrers and at Yealmpton schools is unsatisfactory.

During the year I have received 55 notices of the exclusion of 221 children for disease of one kind or another, of these 107 were reported as suffering from Chicken Pox, 37 from Measles, 37 from Whooping Cough, 9 from Ringworm, 1 from Mumps. In most cases I imagine the diagnoses were made by the parents and must therefore be taken for what they are worth. I visited many of these cases, especially amongst those not under the care of a doctor, and was able to prove the opinions given were correct.

Schools were closed as follows :—

Holbeton—for 3 weeks in September because of Scarlet Fever.

Tamerton Folliot—for 2 weeks in July because of Measles. (Infants).

SCHOOL INSPECTION. (SANITATION.)

SCHOOL.	Average Attend-ance.	WATER SUPPLY.	DRAINAGE.	CLOSET ACCOMMODATION.
Bickleigh	44	Well and Stored Rain Water	Boys' Urinal into adjacent land ...	Bucket system. Fairly well kept.
Brixton	97	" " "	Main Sewer ...	Boys—Water Closet Girls—Bucket system { Well kept. [kept
Cornwood	125	Public supply ...	" " ...	Stoneware troughs, automatically flushed, well
" (Lutton)	26	" " "	" " ...	" " "
Egguckland	107	" " "	" " ...	" " "
Ermington	90	" " "	" " ...	" " "
Harford	12	Private supply ...	Into adjoining land	" " [kept
Holbeton	106	Public supply ...	Main Sewer ...	Stoneware troughs, automatically flushed, well
" Mothecombe	22	Private supply ...	Boys' Urinal into adjacent land ...	Bucket system
Newton Ferrers	56	Public stand pipe & stored rain water	Main Sewer ...	Masonry built trough of obsolete pattern— No floating seal. Unsatisfactory.
Plymstock				[well kept
" Goosewell	93	Public supply ...	Cess-pit	Stoneware trough closets, automatically flushed
" Plymstock	144	" " "	To Sewer	" " "
" Oreston	178	" " "	Main Sewer ...	" " "
" Hoee ...	113	" " "	Cess-pit	Water closets, automatically flushed
" Turnch'pl	59	" " "	Main Sewer ...	" " "
Plym. S. Maurice	130	" " "	" " ...	Short hopper closets, with flushing apparatus,,

Plympton St. Mary	125	Public supply ...	Cess-pit ...	Stoneware trough closets, automatically flushed well kept
National ...				
Geason's	313	" "	Main Sewer	" "
Underwood	56	" "	" "	Short hopper closets with flushing apparatus "
Bridge ...	59	" "	" "	Pedestal "
Lee Mill	70	" "	" "	Masonry built trough of obsolete type, automatically flushed, well kept
Sparkwell	90	" "	" "	Stoneware trough closets, automatically flushed, well kept
St. Budeaux	187	" "	" "	" "
Shaugh Prior	32	Private pump ...	Urinals into adjacent land	Bucket system. Fairly well kept.
" Lee Moor	90	Private supply ...	Land irrigation ...	Water closets are desirable Pedestal water closets, automatically flushed, well kept
Revelstoke	98	" "	Main Sewer	Trough closets, automatically flushed "
Tamerton Folliott	111	Public supply ...	" "	" "
Wembury ...	69	Well and Stored Rain Water ...	Land irrigation ...	" hand flushed. Fairly well kept
Weston Peverell	55	Public supply ...	Cess-pit ...	Short hopper closets with flushing cisterns. Light & ventilation have been improved.
Yealmonth	129	Private supply ...	" "	Short hopper closets, hand flushing daily
" Infants	69	" "	" "	" " "very unsatisfactory

Methods of dealing with Infectious Diseases.—For the better control of Infectious diseases the Infectious Diseases' Notification Act, the Infectious Diseases' Prevention Act, the Public Health (Tuberculosis) Regulations, 1908 and 1911 are in force. Under these I receive notification of every case and I immediately visit the case, supply disinfectants, and printed instructions applicable to the disease notified. I also see that isolation of the patient is as complete as possible and where the circumstances of the house are such as to render it advisable I advise and if necessary (as always is in small pox cases) insist upon removal of the patient to hospital. For small pox cases the Council has its own hospital. For scarlet fever, diphtheria, and enteric fever cases the District Council have an arrangement with Borough Council of Plymouth, under which patients are admitted into the Borough Infectious Diseases Hospital at a charge of £2 2s. per week and cost of Ambulance. Up to the present this seems to have been more economical than the establishment of a hospital by the district Council. It is however a matter for consideration whether the time has arrived for the Council to have a hospital of its own. It will perhaps be wiser to await the development of the Insurance Act, the effect of which will I expect be a readier consent to removal to hospital of infectious cases.

So soon as a patient has recovered or been removed, measures of disinfection are carried out. These consist of fumigation of rooms, bedding, and clothes with sulphur or formalin; washing of floors and clothes in disinfecting fluid, and where necessary, steam disinfection or destruction of infected bedding and clothes.

Disinfectants (fluids and soap) are supplied gratuitously by the Council at certain depots specified throughout the district as per list at end of this report.

The facts mentioned under the paragraphs relating to each infectious disease prove that, in the vast majority of

cases, the directions as to isolation are obeyed and that the measures of disinfection are generally successful. As to Tuberculosis, I deal with it in the section relating particularly to it.

Small pox.—(see also Vaccination).

Small Pox.—For dealing with cases of this disease the Council possesses a good hospital.

The hospital is a well-constructed building of wood and iron, and situated in an isolated position on the road between Lee Mill Bridge and Sparkwell. It has four separate pavilions with connecting passages, and there are two large wards with four beds each, and two small observation wards with two beds each ; in addition there is an administrative block with rooms for the doctor, the matron, and the nurses. There is also a detached building appropriately divided as a mortuary, an ambulance shed, a fumigating chamber, and a wash-house.

There is a good well in the adjoining land from which properly distributed cold and hot water supplies are carried throughout the building. Each ward is provided with its own bath-room and closet.

There is also a caretaker's cottage occupied by a man and his wife, who are under obligation to act (when occasion arises) respectively as attendant and cook.

During the year the water has been piped to the cottage.

Offensive Trades.—Excluding the keeping of pigs there is no offensive trade now carried on in the District.

The fish guano factory which was closed under an order from the Court of Chancery has been re-opened. Many improvements have been made and so far no complaints have reached me as to offensive odours

The Gas Works at Plympton St. Mary have been conducted with more care during the year and complaints as to escape of offensive smells have not been so frequent as in preceding years.

With regard to offensive trades generally, I repeat the suggestion that we should adopt a set of Bye Laws and especially that they should deal with Slaughter houses and the keeping of Pigs.

At present the existing Bye Laws for Slaughter houses only apply to certain particular parts of the district. They should be made to apply to the whole.

Slaughter Houses.—There are 17 in the district. Thirty-four inspections have been made. Of the 17 six can be described as very good and well-kept. Nine have rough walls which should be made smooth by cementing. In one water is necessary, one is insufficiently ventilated, and in two the floors are bad. One has been closed and a new one erected in its place. Some minor improvements have been made during the year and in one a marked improvement in the ventilation was compelled.

I do not see much possibility of getting the above defects remedied until we revise the existing Bye-Laws, and in which I sincerely hope an annual licensing will be insisted upon. If an owner knows that it is necessary to make an annual application for a license it will automatically compel greater cleanliness and attention to structural defects. I consider this revision is urgently necessary. I would prefer of course the abolition of private slaughtering houses, but I do not think that is possible in so large a district as ours is.

Scavenging.—This is done by contracts applicable to certain villages, and on the whole is satisfactorily done.

For Oreston, Pomphlett, and Billacombe, in the Parish of Plymstock, the Council has provided a special iron

cart, and I think a similar arrangement would be of great advantage for the other parts.

Public collections are made as follows :—

Plympton St. Mary	Ridgeway	Every Tuesday.
	Underwood	„ Thursday.
	Colebrook	„ Friday.
Plympton St. Maurice	... ..	every Wednesday.
Plymstock	Oreston	} Three times a week.
	Pomphlett	
	Billacombe	
	Hooe	
	Turnchapel	
Compton	... ..	Twice a week.
St. Budeaux	Crownhill & Honicknowle	Three times a week.
The Crown hill Barracks and		} Three times a week or oftener if necessary.
The Crownhill Hutments		
The Laira Battery		
The Married Quarters at Crabtree		
and Forts Efford, Egg Buckland		
Ernesettle, Agaton, Woodlands,		
and Knowles.		

Bye-Laws.—The Council possess powers with Bye-Laws applicable to :—

New Buildings.
 Alterations of Buildings.
 Slaughter Houses.
 Prevention of Nuisances.
 New Streets and Buildings.

NOTES ON THE EXISTING SANITARY CONDITIONS OF THE VARIOUS PARTS OF THE DISTRICT.

TO BE READ IN CONJUNCTION WITH THE REPORT OF THE
SANITARY INSPECTOR.

NOTE.—I have placed at the beginning of the paragraph relating to each parish the following particulars :—

Area of land in acres designated by “ Area.”

Population as estimated for 1912 designated “ Pop.”

Assessable value for Poor Rate purposes designated by “ P.R.” Assessable value for Special Sanitary Purposes designated by “ Sp. San. P.”

Total amount for which precepts have been issued, during the year for Special Sanitary Purposes designated by “ Exp.”

N.B.—These precepts are only issued when the amount required demands a rate of 1d. in the £, or when the amount required is at least £10.

Amount which represents the value of a special sanitary rate of 1d. in the £ designated by “ M.”

BICKLEIGH.

Area 2359.	Pop. 315.	P.R. £4040.	Sp. San. P.
£2310 12s.	Exp. Nil.	M. £9 12s.	8d.

The WATER SUPPLY of the villages of **Bickleigh and Roborough** is very good, as it is derived from the Plymouth mains which pass through them.

DRAINAGE **Roborough** is badly drained ; the sewers empty into cess-pits, which are very near the houses. A good system of drainage could easily be constructed, and an admirable site for irrigation could be chosen.

Interviews have been held with local landowners with a view to obtaining land for a sewage scheme. I am sorry to say that up to the present nothing has been arranged and I fear considerable opposition. The Council's engineer is preparing a plan for the drainage of the village and I hope the Council will press the matter to a definite issue.

• **Bickleigh.** There are no public sewers here, nor are any desirable, as the sewage from each house is disposed of satisfactorily.

BRIXTON.

Area 3124. Pop. 680. P.R. £4850. Sp. San. P.
£3490 5s. Exp. £20. M. £14.

The public **WATER SUPPLY** is derived from a moderately deep well, and reaches the villagers through two public pumps. The well yielded enough water for ordinary domestic purposes, but is insufficient to effectively flush the sewers, which has to be done occasionally by the Sanitary Inspector. I do not consider the water supply sufficient. The suggestion made by the L.G.B. that the village should be supplied from the Plympton source is a good and practicable one.

The western part of the village is well sewered, the sewers being of modern construction and discharging into a well-made tank, which works on the septic system. The effluent is always good, clear, and inodorous. The eastern part of the village has sewers of obsolete pattern (in which chokages are common), and which discharge into two cess-pits, in two separate fields. These cess-pits

are emptied as occasion demands, whilst the effluent is irrigated over the adjoining land. These old sewers should be thoroughly examined, and if, as is probable, they are shewn to be defective, they should be relaid, and an extension of them be made so that the houses in the Park could be properly drained.

Torre, Coombe, and Hornicombe. These hamlets are provided with a good and ample supply of water, which is distributed through public taps.

In neither of them is there any sewage system, and as all the houses have gardens attached, I don't think one is desirable.

Spriddlestone. WATER SUPPLY is from a public pump, fixed over a shallow well. The yield is sufficient, and I have not yet found any suspicion of impurity.

There is one public sewer for the discharge of slop water into the adjoining orchard.

Steer Point. This is supplied with water from a well. Some of the houses have bucket closets, but two have water closets which drain to cess-pits.

COMPTON.

Area 167. Pop. 385. P.R. £2648. Sp. San. P.
£2771 7s. 6d. Exp. £360. M. £11 10s.

The WATER SUPPLY is very good, being from the Plymouth mains.

The DRAINAGE. Generally speaking the house drains and sewers are good. The whole of the sewage is now dealt with in the tanks at Egguckland.

SCAVENGING is done by a Contractor twice a week.

CORNWOOD.

Area 10,087. Pop. 1070. P.R. £9234. Sp. San. P.
 £5292. Exp. Nil. M. £22 1s.

WATER SUPPLY is very good from the public works. It is taken from deep springs situated on the fringe of Dartmoor, and after being collected in a reservoir is distributed throughout the village by stand pipes. In a few cases householders have taken it into their houses.

I agree with the suggestion of the Sanitary Inspector as to use of the Tank near Mr. Mudge's.

The villages of **Corntown** and **Puttypool** also obtain water from this source.

DRAINAGE. Part of the village is well sewered, the drain discharging into a cess-pit, from which the effluent is irrigated over grass land.

Lutton. **WATER SUPPLY.** Very good from public works. The water rises from uncultivated upland sources, and is thence piped to a reservoir and distributed through the village from stand pipes.

The whole of the supply pipes for Higher Lutton have been scraped. During the year a complaint was received as to a deposit being noticed in the water. On investigation this was proved to be iron rust, due to the action of the water on the pipes. I have proposed that the water be passed through a screening chamber of Lime stone, so as to slightly harden the water.

DRAINAGE. The village is sewered, and the sewage is piped to two cess-pits, from which it is irrigated over grass lands.

EGGBUCKLAND.

Area 3265. Pop. 2170. P.R. £12.403. Sp. San. P. £8412
Exp. £690. M. £35.

The public WATER SUPPLY is very good. The District Council, by consent of the Local Government Board, have an arrangement with the Plymouth Town Council, by which the village is supplied with water from the Plymouth mains. The total number now connected with the mains is 69, including 15 supplied by meter. Houses in Crownhill to the number of 32 are supplied direct by Plymouth authority.

The WATER SUPPLY of **Crab Tree, Laira, and Longbridge** is very unsatisfactory, and became distinctly dangerous during the summer drought of 1911. During 1912 arrangements were concluded with Plymouth by which the Plymouth main will be extended. A Local Government Board Enquiry was held on October 22nd, and I am glad to say the scheme has since received official sanction. Tenders have been accepted and the work will be done early this year.

Riverford is supplied from a local source which has proved satisfactory.

The DRAINAGE. This village is well sewered, and the sewage is conducted, together with that of Compton Gifford, to sewage treatment tanks, from which the effluent passes into the Laira estuary at Longbridge.

Two new screening chambers have been constructed by which the clogging of the filter is prevented. The whole of the iron work has been repainted.

The tanks are in charge of an attendant, and are working satisfactorily. The effluent is good and causes no nuisance.

Crown Hill Villas have been drained into the St. Budeaux sewers. 1183 feet of drain having been laid for the purpose

ERMINGTON.

Area 4928. Pop. 840. P.R. £5954. Sp. San. P. £4040.
Exp. £10. M. £17.

WATER SUPPLY. The public supply is from a well which yields plenty of water, which is piped to a public tap. There are several other private wells in the village. The public well is situated so near to the graveyard that I have at intervals analysed the water, but have found no reason as yet to doubt its purity. In spite of this, however I think efforts should be made to provide a public supply sufficient in quantity to distribute throughout the village, especially as many of the houses are provided with water closets.

The water supply of a few cottages at **Lee Mill** is most unsatisfactory, and efforts have been made to obtain water from the Lee Mill source. I propose dealing with this matter under the H. and T. Planning Act.

DRAINAGE. For this purpose the village is divided into two parts, an eastern and a western. For the western division a new system of drains and sewage tank were constructed in 1903.

The Tanks have been emptied as occasion demands and their contents disposed of as manure.

Westlake. A well-laid system of sewers exists. They discharge into a tank from which the effluent is irrigated over the adjoining land.]

WATER SUPPLY is from a public well.

Langbrook. The proposal which has been made for protecting the Water Supply of this hamlet should be enforced as the open well is subject to dangerous pollution from storm water.

HARFORD.

Area 3318. Pop. 125. P.R. £1936. Sp. San. P.
Exp. Nil.

There is no public water supply as the houses all have good and independent supplies, either derived from upland surface moor streams or springs. The parish is also happy in having no drainage scheme, nor is there any necessity for one.

HOLBETON.

Area 4627. Pop. 790. P.R. £5159. Sp. San. P.
£3884 10s. Exp. £20. M. £16 2s. 2d.

WATER SUPPLY. This is satisfactory both in quality and quantity. It is obtained from springs situated in the land adjoining the village. One of these springs is situated at a much lower level than the other, and the water therefrom is lifted by a windmill to a reservoir, from which it is distributed throughout the village. The collecting pipes have been taken up and cleaned, and the supply thereby increased.

DRAINAGE. The village is well sewered, and the sewage is efficiently and safely disposed of by surface irrigation.

NEWTON FERRERS.

Area 3326. Pop. 755. P.R. £4039. Sp. San. P. £3217.
Exp. £50. M. £13.

WATER SUPPLY. Various communications have passed between the Council and the Local Government Board and the result is a very definite refusal of any sanction being given to the proposed local scheme. So many efforts have been made in the past to find a local source, and as each proposed supply has been rejected,

there seems to be nothing now but to adopt a supply from an extra parochial source and evidence is accumulating that the Local Government Board will insist upon such a supply. I cannot do otherwise than express my approval, for I am sure that Newton Ferrers cannot advance without an adequate and reliable supply of water, not only for ordinary purposes but for efficient flushing of the sewers. The financial difficulty is really a serious one for a poor parish to bear and I hope means may be found by which the repayment of the necessary loan may (under the exceptional circumstances) be spread over a longer term of years than is usually allowed.

DRAINAGE. The village is sewered but the sewers are very insufficiently flushed, especially during the summer, when they want it most. The Public Schools closets have to be flushed by hand. They are in a very unsatisfactory state. The outfall is into the Newton Creek, a part of the River Yealm.

There is room for much improvement here, but I feel it is premature to suggest anything until the water question is solved.

Torre Village. **WATER SUPPLY.** Quality good, and distributed through the village by standpipes. It is to be increased—negotiations are in hand for a new lease by which additional springs will be utilized.

DRAINAGE. There is no system of sewers. The closets are on the dry earth and cess-pit system.

PLYMPTON ST. MARY.

Area 10,353. Pop. 3985. P.R. £30,502 Sp. San. P. £19,311. Exp. £660. M. £80 9s. 3d.

The **PUBLIC WATER SUPPLY** is excellent, and is well distributed throughout **Ridgeway, Colebrook, Underwood, and Hemerdon.** The original supply is

derived from Bottle Hill, on the borders of Dartmoor, being collected from adits driven into the hillside. The actual number of connections in Plympton St. Mary and Plympton St. Maurice is now 932, of which 785 are house connections, whilst 38 are through meters.

During 1910 a new and additional supply from Lee Moor was added. This water is taken direct from deep springs situated in the granite, and from a source which renders it a water of exceptional purity. The yield is a large one (it is estimated at 199,000 gallons per day), and will probably meet all demands which may be made upon it for many years to come, either by the two Plymptons or the growing parish of Plymstock.

I am glad provision was made in 1910 for increasing the supply whenever necessity arose. The suggestion that Brixton and Newton Ferrers should have water from this source proves the wisdom of this provision.

Lee Mill and Smithaleigh. Here there is a good public supply taken from springs situated in pasture land. It is well distributed. The need for increasing the size of the storage reservoir has been recognized. The collecting pipes have been opened up and an additional spring taken in. Negotiations for a new lease are in hand.

Mount Pleasant. Here there is a public pump and well.

Venton. The west end of this village has water from a public well and pump. The east end is from a small spring, whence the water is piped to a tank. Both supplies have proved satisfactory.

Sparkwell. The public water supply is a satisfactory one. It is derived from a deep well, from which the water is conveyed to a reservoir, and thence distributed to various stand pipes in the village. It is also taken into a few of the houses.

DRAINAGE. **Ridgeway, Colebrook, and Underwood** have a system of sewers from which the sewage is disposed of by irrigation over grass land. During the year 441 feet of new sewer has been laid.

Hemerdon. This is sewerred, and the sewage disposed of by land irrigation.

Lee Mill. The village is well sewerred, the sewers discharging into a public cess-pit, from which the effluent is irrigated over the land. I regret that the sewer has not been extended. The work has been sanctioned and should be done forthwith.

Venton. This is partly sewerred, the remaining part has earth closets.

Sparkwell. This is sewerred, the sewage is discharged directly on to the land and is disposed of by irrigation.

PLYMPTON ST. MAURICE.

Area 232. Pop. 1100. P.R. £3553. Sp. San. P. £3334 15
Exp. £140. M. £13.

WATER SUPPLY is excellent in quantity and quality being from the same source as that of Plympton St. Mary, q.v.

DRAINAGE. The sewers are part of the same system as that of Plympton St. Mary.

For account of work done in this parish, and in that of Plympton St. Mary, see Sanitary Inspector's Report.

PLYMSTOCK.

Area 3556. Pop. 3985. P.R. £14820. Sp. San. P. £13687. Exp. £680. M. £57 6s.

WATER SUPPLY. It is derived from the same source as that of Plympton St. Mary, and the mains are

distributed throughout the whole of the parish except the village of Staddiscombe.

During the year 20 additional houses have been supplied with water.

On December 31st, the total number of houses connected with the mains was 645, whilst other connections (including houses and establishments having meters) bring the full total to 774.

In **Staddiscombe** there are three public pumps placed in convenient positions and yielding a good supply of water.

In **Turnchapel** there are also two public taps which supply water from a well under the control of the Council.

In **Oreston** and **Plymstock** there are public pumps which yield fair supplies of water.

DRAINAGE. **Pomphlett, Oreston, Lower Hooe, and Turnchapel** are all sewered and discharge their sewage into the Cattewater. Many improvements have been made in closet accommodation, but much still remains to be done.

Plymstock. In this village there is a good public sewer which discharges into a deep cess-pit, from which the sewage is efficiently disposed of, as occasion demands, on the adjoining land. A scheme has been prepared for the complete drainage of the village, and it is intended to proceed with this during the coming summer.

Elburton. A very complete and good drainage system has been finished and is now in good working order. The effluent is satisfactory and only a few houses remain to be connected.

The work done in the village during the year reflects great credit on the Council and has proved the efficiency of the Housing and Town Planning Act in the quick abatement of insanitary conditions.

Billacombe, Higher Hooe, and Staddiscombe. In these villages there are no public sewers for reception of anything but slop water.

A good number of the houses, except those which possess cess-pits, are supplied with earth closets, which as a rule are kept in a wholesome condition. In Billacombe the scavenger removes the contents of the earth closets regularly, in the other villages the householders dispose of it on their gardens.

I think an effort should be made to acquire land so that a small sewage system could be devised for Billacombe cottages.

REVELSTOKE.

Area 1544. Pop. 395. P.R. £1296. Sp. San. P.
Exp. Nil. M.

The WATER SUPPLY is good in quality and quantity. It is distributed by iron mains to stand pipes. That at Bridge End should be better protected.

DRAINAGE. The village of Noss Mayo is sewered, but several closets are on the earth-bucket and cess-pit systems, and therefore not connected with the drain. Some of the houses are only just above high-water mark, and one of the sewers is also in this position, it is therefore inefficiently flushed. The sewage is discharged into the creek, a part of the River Yealm.

ST. BUDEAUX.

Area 1731. Pop. 1750. P.R. £8226. Sp. San. P. £6066.

Exp. £810. M. £25 5s. 6d.

Crownhill and **Honicknowle**. The WATER SUPPLY is very good. It is derived from the Plymouth mains. For Honicknowle the District Council have guaranteed a certain annual payment to the Plymouth Town Council for that purpose. There are still a few isolated cottages which take water from private wells, but these are decreasing in number.

DRAINAGE. Crownhill and Honicknowle, in which nearly all the inhabitants of this parish live, are provided with a large and comprehensive system of sewers, by which the sewage is taken to the borders of the Borough of Devonport, where it then enters the sewers of that authority. The ultimate treatment and disposal of the sewage is also carried out by that authority. During the year 1100 feet of new sewers have been constructed for the drainage of Alexandra Cottages and one of 240 feet long for drainage of cottages on the border of Tamerton.

SHAUGH PRIOR.

Area 8837. Pop. 770. P.R. £15,628. Sp. San. P.

Shaugh. The WATER SUPPLY. There is no public supply, but the houses have independent sources and generally speaking the quality is good.

DRAINAGE. There is no system of sewers, nor do I think one is at present desirable. The houses are provided with earth or cess-pit closets, and slop water is disposed of on the gardens.

Lee Moor. The WATER SUPPLY is abundant in quantity and good in quality. It is derived from the adjoining moor, and is distributed to most of the houses from a reservoir through a good service of pipes. Such houses as are not connected with the pipes have independent supplies.

DRAINAGE. There is no public system of sewers, nor is one required. The majority of the houses are provided with earth closets, and have good gardens attached. The schools and a small block of houses surrounding them are provided with water closets, the sewage from which is irrigated over adjoining land.

TAMERTON FOLIOT.

Area 4789. Pop. 1075. P.R. £8573. Sp. San. P. £6351.

Exp. £40. M. £26 9s. 3d.

Tamerton. The WATER SUPPLY is good and abundant, being derived from the Plymouth mains. In addition, there are two public wells, which, although they are situated in somewhat doubtful positions, yet yield water in which I have not been able to detect any impurity. There are also some private wells.

DRAINAGE. The whole of the village is now sewered by extensions made recently, the main discharging into the Tamerton Creek.

Franklin Cottages. The WATER SUPPLY is good and abundant from the Plymouth mains.

DRAINAGE. The slop water is collected in a cess-pit from which the effluent is passed through a rough filter under the road. The closets are on the earth-bucket system, and the houses all have good gardens attached.

WEMBURY.

Area 3131. Pop. 525. P.R. £2913. Sp. San. P. £2145.
Exp. £5. M. £8 10s.

Knighton. The WATER SUPPLY is derived from three different sources, and I have no reason to doubt its quality or quantity. It reaches the villagers through public taps, which are placed within reasonable distance of the houses. A few householders have independent supplies.

DRAINAGE. The village is sewered, the sewers discharging into a cess-pit, from which the effluent is irrigated over the adjoining land. As many of the houses have large gardens attached to them, they are provided with earth or cess-pit closets.

Downthomas. WATER SUPPLY. There are two public pumps, which draw water from two separate wells.

WESTON PEVERELL.

Area 701. Pop. 180. P.R. £2119. Sp. San. P. £1415.
Exp. £108. M. £5 16s.

Weston Mill. The WATER SUPPLY is derived from a public well, which yields a sufficient quantity of good water. I should, however, like to see a supply laid on to the houses from the public mains near the village, especially as there are several water closets without any arrangements for flushing. The difficulty arises from the fact that the hamlet is partly within the Borough of Devonport, and partly within the Rural District of Plympton St. Mary, and also because the Borough of Plymouth has the statutory right to supply water to the whole of the hamlet, whilst the Borough of Devonport has also the right to supply water to that part of the hamlet which is within the Rural District !!

DRAINAGE. The village drains into the Devonport system.

YEALMPTON.

Area 3177. Pop. 905. P.R. £4304. Sp. San. P. £3177.
Exp. £180. M. £13 4s. 0d.

The WATER SUPPLY is a public one. The water is derived from springs situated at a high level and in grass land. A large area of the land around the springs is, by agreement, kept free from manure. The water is of good quality, and, as far as present experience goes, is of sufficient quantity. It is distributed through the village from a series of stand pipes. The supply should be extended to Yealm Bridge.

The total number of connections is 20 of which 15 are to houses.

The village is sewered, some of the sewers being of modern construction, whilst others are far from perfect. The sewage is received into a series of cess-pits, from which it is irrigated over adjoining land.

Yealmbridge. The WATER SUPPLY is bad. It is derived from wells which are markedly affected by the condition of the adjoining river.

DRAINAGE. There is no system of sewers. The houses are supplied with earth or cess-pit closets.

Dunstone. The WATER SUPPLY is very good both as regards quantity and quality. It is a public one, and is derived from springs situated at a considerable level above and distance from the village. It is distributed from stand pipes. The collecting pipes have been taken up and cleaned, and relaid, and the yield has thereby been increased. A new lease is being prepared by which an extension of the pipes will probably be arranged for.

DRAINAGE. There is a system of sewers from which the sewage is irrigated over the land.

REPORT OF THE SANITARY INSPECTOR FOR THE YEAR 1912.

GENTLEMEN,

Herewith I have the honour of submitting to you the following report of the Sanitary work done during the year 1912.

BICKLEIGH.

Roborough Village. The sewers and outfalls have been cleaned occasionally by the owners of most of the houses, but the sanitary condition of the village is very unsatisfactory.

In May I again brought the matter before the Sanitary Committee with the hope of hastening the adoption of a drainage scheme.

BRIXTON.

Brixton Village. The Public Pumps have been repaired and kept in working order, and the well has been cleaned out.

The main sewers have been regularly hand flushed and the grit chamber cleaned out, and the rough filter kept clean.

The effluent from the sewage tank has been satisfactory, and the filter has worked as before with good result, as mentioned in last year's report.

The eastern portion of the village needs an improved system of sewers which should extend to Park Cottages and Park House, and from which all storm water should be excluded.

Spriddlestone. The sewers have been cleaned out and flushed.

The well has been cleaned out and the pump repaired.

Coombe, Hornicombe, and Torr. The water tanks have been cleaned out and the taps kept in repair.

The supplies of water in these hamlets are abundant and good, and there has been no discolouration of the water during the excessive rain of the year.

At 7 and 8 Kitley Cottages, Steer Point, earth closets have been converted into water closets fitted with pedestal pans which will however have to be hand flushed as no water can be laid on.

The slop water drain at No. 6 has been repaired.

COMPTON GIFFORD.

Drains at Hazeldene and Myrtleville have been repaired.

The Scavenging contract has been terminated and arrangements are now in force by which refuse will be removed twice a week instead of once as hitherto.

CORNWOOD.

The public cess-pits have been cleaned out and their contents properly disposed of as manure, after mixing with lime and earth.

The sewers are automatically flushed several times a day.

New properly laid and ventilated drains have been constructed and a water closet provided at Wisdom Farm.

The Reservoir and water mains have been cleaned out and taps kept in good repair.

As the new vicarage is occupied, and supplies for domestic purposes have been laid on at Delamore House Farm and the Western Lodge, I consider the recommendation of last year as to utilizing the water tank (holding 1500 gallons) near Mr. Mudge's should be adopted. No inconvenience was experienced during the Summer because the occasionally heavy rainfall more than counterbalanced the small storage there is.

Lutton. The public cess-pits have been cleaned out, and their contents properly disposed of by mixing with lime, and distribution over the adjoining land.

EGGBUCKLAND.

Eggbuckland Village. A new piece of drain has been laid in, and an upstairs Water Closet provided at the Cottage.

New water service pipes have been laid in at 1 to 6 Victoria Cottages.

At 1, 3, 4 and 5 Home Park the drains have been put in order and ventilated, and connected up to the new main sewer, and the cess-pit which formerly received the drainage and was a frequent nuisance abolished. The Closets have been fitted with Pedestal Pans and Flushers, and the surface of courtyards outside the back doors have been cemented.

At No. 2 Home Park, new drains have been put in connected to main sewer, and the closet fitted with a new Hopper Pan, hand flushed.

The slop water drain at Widey Cottages has been unchoked.

A new piece of branch drain has been put in and a water closet erected fitted with a pedestal pan and flusher at Hughendon.

Crownhill Villas. A new sewer has been carried up to these Villas from the St. Budeaux Main Drainage Scheme, joining up with the Whitleigh terrace sewer.

New properly laid and ventilated drains have been put in, connected up to the main sewer.

A new Water Closet has been erected at No. 1, and at 2 and 3 the Earth Closets have been converted into Water Closets, each fitted with a pedestal pan and flusher.

ERMINGTON.

Ermington Village. The cess-pits and sewage tank have been twice cleaned out and their contents mixed with lime and disposed of as a manure.

At Parsonage Farm new and properly laid ventilated drains have been put down and a water closet erected with pedestal pan which has to be hand flushed.

The public well has been cleaned out.

Cadleigh Park. The cess-pit has been cleaned out and the contents properly disposed of.

The water supply here is from private wells.

Westlake. The public well has been cleared out and the pump repaired.

HARFORD.

At Harford Bridge Cottages the old cesspit closets are in process of being abolished, and proper sanitary pails will be provided.

HOLBETON.

Holbeton Village. The public cesspits have been cleaned, and the contents disposed over the land.

At Cottages Nos. 15 to 21 inclusive, new gully traps have been put in in place of defective ones, and the surface of courtyards outside back doors have been cemented.

NEWTON FERRERS.

The cottage occupied by Mr. William, and owned by Miss Leonard, having been condemned and a closing order served, has been vacated.

Torre. The cottages at Torr Bridge occupied by Messrs. Toms, Netherton, Ryder and Mrs. Masters have been condemned, and a closing order served, and two of them vacated.

PLYMPTON ST. MARY.

Ridgway, Colebrook, Underwood. The cess-pits for these villages have been twice cleaned out and the contents, after being mixed with raw lime, removed some distance from the houses and disposed of by ploughing into the land.

The sewer outfalls have been regularly inspected and cleaned, and where possible flushed and during the hot weather with disinfectant solution.

Throughout the villages the sewers have been repaired in several places. Two old disused connections have been cut off at Bridge Tenement

On several occasions during the year we have had abnormal rainfalls, but no serious flooding took place.

A new sewer has been laid in the road at the back of the Old Priory, in the place of a defective one running under the houses.

The matter of connecting up the drainage of Sydney cottages to the main sewer was considered by a committee but no further action was taken.

An interceptor with chamber has been put in at Ridgway House, and a new upstairs water closet at Barnett's.

New, properly laid and ventilated drains have been put in at Regent Villa, and at Mrs. Revell's butcher's shop.

Underwood. An extra window has been put in to one bedroom to improve light and ventilation, and other repairs executed at Mrs. Strode's cottage lately occupied by Mr. T. Nicholls.

Colebrook Station. Two additional waterclosets have been erected fitted with pedestal pans and flushers, and other repairs carried out at Mrs. J. Triscott's cottages and a similar one provided at Mrs. Maddock's cottage, The Bank; and at Messrs. Wadge's and Roger's the roofs have been raised and flushers provided.

Flushers have also been put in at Messrs. Jones, Hawkes and Hemphill's.

At Messrs. Bray, Maddock, Jones, Hawke and Rogers cottages an additional window has been put in to improve light and ventilation of bedrooms.

Eave gutters have been fixed, and other repairs carried out to prevent dampness, and to make walls and floors sound.

The drain has been unchoked at Rose Cottage, and drains repaired, and an intercepting chamber built at 6 Victoria Villas.

A new branch drain has been laid to gully of Motor House, and air inlet repaired at Yealm Park Villas, and a new water closet erected, fitted with a pedestal pan and flusher at No. 1 Auburn Place.

Lee Mill. The public cesspit has been four times cleaned out, the contents mixed with lime, and afterwards removed and used as manure. The overflow has been kept clean.

New properly laid and ventilated drains have put in at 1 to 10 inclusive Kimburn Cottages, and at 1 to 5 inclusive Buttsford Cottages, and a separate water closet erected for each, all are fitted with pedestal pans and flushers.

Venton. The sewer and outfalls have been regularly cleaned and hand flushed, and the pump repaired, and water tank cleaned out.

At Mr. Pode's Cottages, Folley, two earth closets have been erected, and one cottage entirely renovated. An earth closet has also been provided at Grazechalder's farm.

Mount Pleasant. The well has been cleaned out, and the pump repaired.

Sparkwell. The sewers have been flushed, and the outfall kept clean.

The main sewer has been repaired at the head of the village, and a new road gully trap put in in the place of an open grid, which allowed sewer gas to escape.

The drains of the vicarage have been repaired.

Hemerdon. The sewers have been regularly cleaned and flushed, and the outfalls kept clean.

PLYMPTON ST. MAURICE.

The public cess-pits have been 3 times cleaned out, the contents mixed with Lime and Earth and afterwards spread over the land.

The sewers generally have been regularly inspected and at times flushed with disinfectants, and in several places repaired.

A new closet pan has been put in at the schools.

Properly laid and ventilated drains have been put in and a cess-pit constructed, and the closet fitted with a pedestal pan (hand flushed) at Wolverwood.

PLYMSTOCK.

The cess-pit has been cleaned out and the overflow kept clean, and the contents disposed of over the land.

New properly laid and ventilated drains have been put in, connected with the main sewer and the old cess-pit abolished at Hillside.

Lower Pomphlet. A very old cottage with only one floor has been condemned and vacated.

The closets have been repaired and the courtyards cemented at Redhill Cottages.

Elburton. A new system of sewer has been laid throughout the village.

60 Houses have had properly laid and ventilated drains put in, connected to the main sewer. 19 have had entirely new water closets erected. 12 have had Earth closets converted into water closets. 29 have had cess-pits abolished and water closets substituted.

In every case a house has a separate water closet of substantial nature, having either stone or brick walls and cemented floors ; each is fitted with an open pedestal pan (which leaves the whole area of the floor accessible for cleaning) and a flushing apparatus.

3 Houses will have water closets erected and drains laid early in the New Year, so also will the public house.

In respect to two other houses, legal notices have been served to connect up drains with the sewer, which will complete the Village.

New properly laid and ventilated drains have been laid and connected to the main sewer at Mr. Body's Slaughter House.

Drains have been repaired at Glenthorne.

Hooe. The Public Closet and Urinal have been repaired and limewashed, and regularly kept clean.

New properly laid and ventilated drains have been put in at the Baptist Chapel Cottages, and Mr. Harris's Tea Gardens, and at the latter 2 water closets have been erected, fitted with pedestal pans and flushers.

The drains have been unchoked at the Schoolmaster's house.

Oreston. The sewers have been regularly automatically flushed.

The public pump has been kept in repair.

New properly laid and ventilated drains have been put in and a new water closet erected, fitted with pedestal pan and flusher at Mr. Vinnicombe's.

Several Houses have been inspected in compliance with the Housing and Town Planning Act, and the defects made known to the owners.

In the case of one owner extensive improvements have been arranged for, and at 10 houses a separate water closet is to be provided for each house. Some of the cottages are to have back doors, and extra windows to improve Light and Ventilation.

Staddiscombe. The public Wells and Water Tank have been cleaned out, and the Pumps and Taps kept in repair.

The cottages have been inspected and notes made for future action under the Housing and Town Planning Act.

Turnchapel. The main sewers have been kept in repair and the outfalls kept clean. They are fairly well flushed.

The public Urinal is regularly kept clean.

The old water supply from the Well field has been kept in order, and the public Taps repaired.

New and properly laid and ventilated drains have been put in and the closets fitted with pedestal pans and flushers at 4, 5, 6, 7 Hillside.

A new closet pan and gully trap have been put in at Woolland Cottages.

A small block of houses is scheduled for action under the Housing and Town Planning Act.

REVELSTOKE.

The sewer beaches have been regularly kept clean.

A nuisance has been abated at No. 49 cottage, which was kept in a filthy state.

There are some houses in the Village which will require attention during the coming year.

ST. BUDEAUX.

Crownhill. The flusher has been repaired at 28 Whiteleigh Terrace.

Honicknowle. For 1 to 8 inclusive, Alexandra Cottages new, properly laid and ventilated drains have been put in and connected to the main sewers, and a separate water closet fitted with pedestal pan and flusher, erected for each house, and the back yards cemented, and washhouses provided for Nos. 1 to 4. The old earth closets have been abolished.

A new outside water closet has been erected and connected with house drains at Warwick Park.

A flusher has been put to the closet at No. 1 Victory Cottages.

2 extra windows have been put in to improve light and ventilation, and the scullery floor cemented at Whiteleigh Corner Cottage.

A new branch sewer has been laid from the manhole near Mr. Callaway's Cottages, Tamerton Corner to a point opposite West Park House, to enable this house and West Park Cottages to be drained into the main.

The owner of the cottages has been asked to connect up, and to provide a water closet for each house.

TAMERTON FOLIOT.

The public pumps have been repaired and the wells cleaned out.

New, properly laid and ventilated drains have been put in and an upstairs water closet provided at Milford House.

New, properly laid and ventilated drains have been put in at 1 and 2 Warleigh Cottages, 1, 2 and 3 Kemps Cottages, and 1, 2 and 3 Rock Hill Cottages.

7 New water closets have been erected, each fitted with pedestal pans and flushers, and one repaired and flusher fixed.

In respect of No. 3 Rock Hill Cottages the ground on the North West side has been excavated below the level of the ground floor, and the surface cemented and all land and storm water properly conveyed away.

A back door has also been put to get through ventilation.

New, properly laid and ventilated drains have been put in at Harwood House, and Seven Star Inn, and at the latter a new water closet has been erected for private use and the public one put in order, each being fitted with a pedestal pan and flusher.

The floors of both have been cemented. The urinal floors and walls have also been cemented.

The light and ventilation has been improved at Messrs. Martin and Deacon's Cottages in Star Lane by having an extra window put to each bedroom.

The drains have been unchoked and repaired at the Tamar Arms.

A new branch drain has been put in to take bath waste at Looseleigh House.

New, properly laid and ventilated drains have been put in and a water closet erected fitted with a pedestal pan and flusher at Dunsbear Farm.

An old cess-pit which was a nuisance has been abolished, and an earth closet provided at Coppers Farm.

A draw-off tap direct from the water main for drinking purposes has been provided in the place of one which was taken from a small tank and liable to get fouled at North Broadley Farm.

The drains have been repaired at Little Fancy.

Franklands. At 1 to 8 inclusive, Franklands Cottages, the ground at the back of the houses has been excavated below the ground floor level and a dry area made, and the surface cemented and a channel made to convey away all land and storm water which hitherto soaked through the walls and into the floors of the living rooms.

At 3, 6, 7 and 8, an extra window has been put to each Bedroom to improve light and ventilation.

The windows to the other houses will be put in early in the New Year.

WEMBURY.

Knighton. The public cess-pit has been cleaned and the contents mixed with lime and earth and afterwards spread over the land.

The water supply has been satisfactory.

Downton. The wells have been cleaned out and the pumps have been put in good order.

There was no shortage of water during the Summer.

WESTON PEVERELL.

Weston Mills. The public pump has been repaired.

The old leat has been kept cleaned out and water kept flowing as far as possible.

Drains have been repaired at Manadon Hall and Burrington House.

The matter of a supply of water being laid on stands the same as last year.

YEALMPTON.

The public cess-pits have been cleaned out and their contents disposed of satisfactorily.

A new water closet has been erected and new drains put in at cottage No. 77.

Yealmbridge. Quarry Cottage, a wood and iron structure has been condemned and vacated.

An extra window has been put in to one of the living rooms at Kiln Cottage.

Plans have been passed for the reconstruction of cowsheds at Higher Whitleigh Farm for 40 cows.

A supply of water from the Plymouth mains has been laid on (in the place of that from a suspicious well) at Dunsbear Farm, and for the Farm house, a water closet, with pedestal pan and flusher and properly laid and ventilated drains constructed.

The cleansing and limewashing of the cowsheds on the whole has been satisfactorily done. In some cases notices have had to be served to remove dung and whitewash. These notices were complied with.

The process of bringing all the premises up to the standard is somewhat slow, but every year improvements are being made.

HOUSING AND TOWN PLANNING ACT.

I am glad to say that improvements in the general condition of the houses have been produced more quickly and more efficiently than in former years, because of the powers which the above Act have brought into force. I am also glad to report that I have found a willing co-operation on the part of owners, and that the Tradesmen are more ready to advise owners to allow good and substantial work being done. The details in the following report will shew the large amount of work which has been done.

I have inspected 271 houses and my attention has been chiefly devoted to detecting defects in :—

- 1.—Closet Accommodation. Drains. Disposal of Slop water.
- 2.—Water supply.
- 3.—Dampness.
- 4.—Light and ventilation.
- 5.—Condition of back yards, washhouses, and approaches.
- 6.—Number of inmates.

The standards I have aimed at are :—

- 1.—That every house should have a separate closet, and if possible a water closet provided with a flushing apparatus. Where water is unavailable a dry earth closet has to be accepted. That proper and well-constructed drains should be provided for all purposes, including slop water.
- 2.—That the water supply should be sufficient in quantity, free from any possible pollution and within a reasonable distance of the house.

- 3.—That walls, roofs, windows, and ground floors should be in such good repair and so constructed as to prevent or cure dampness. That where walls are built against the ground, such ground should be excavated below the level of the ground floor and a dry area made, and that proper provision should be made for carrying off all ground and slop water.
- 4.—That there should be windows, both in number and size, to provide sufficient light and thorough ventilation. The windows should have both top and bottom sections made to open.
- 5.—The approaches, the floors of washhouses, and court-yards should be cemented, or otherwise made impervious, and properly drained.
- 6.—A minimum cubic capacity for bedrooms of 300 cubic feet for every individual over 12 years of age, and 150 for each child under 12 years of age.

Action taken and improvements effected :—

12 Houses have been condemned as being unfit for habitation ; 3 of these have been voluntarily closed by the owner, who I am pleased to state intends to rebuild 3 of a modern type ; for the remaining 9 closing orders have been served.

5 of the orders have been complied with and the houses have been vacated.

One has been put in good repair, and one occupied by a very old woman has been allowed to remain for the time.

In 2 cases the occupiers have been unable to find another house.

Improvements have been carried out in 136 houses :—

56 have been provided with entirely new water closets, all fitted with an open pedestal pan, and cemented floors laid, and all have been properly drained to sewers.

22 have had cess-pits abolished and new drains laid to sewers.

16 have had earth closets converted into water closets and all drained into sewers.

11 have been redrained and water closets provided.

7 have had drains repaired.

2 have had earth closets erected.

6 have had new water service pipes put in.

16 have had extra windows put in to improve light and ventilation in living and sleeping rooms.

8 have had overcrowding abated, these were the only cases discovered in all the inspections, and with 2 exceptions they were not of a serious nature.

With one exception only the houses that have been dealt with have had a separate water closet or earth closet provided for each house, and with 3 exceptions all water closets have been provided with a proper flushing apparatus, and in all cases a modern type open pedestal pan has been provided. This leaves the whole area of the floor accessible for cleaning.

The drains have all been well laid, each provided with Inspection Chambers for access, and all properly ventilated and twice tested.

At several of the other houses inspected improvements are now being carried out, and at others promises have been made to commence the work required, and I hope at the end of another year to be able to report great improvements in the housing of the working classes.

In the case of twenty houses all on one large estate, several are in a bad state, and on another similar estate there are 5. I have met the Agents, but they demur against making much improvement. These houses will be inspected by the Medical Officer of Health and further dealt with.

The inspections have been made in the following parishes :

Brixton	...	...	...	...	...	...	10
Bickleigh	...	...	...	...	...	...	5
Ermington	...	...	...	...	...	...	5
Eggbuckland	...	...	...	...	...	...	14
Holbeton	...	...	...	...	...	...	9
Plymstock	...	...	...	...	...	...	95
Plympton St. Mary	...	...	...	...	...	...	47
Newton Ferrers	...	...	...	...	...	...	5
Revelstoke	...	...	...	...	...	...	17
St. Budeaux	...	...	...	...	...	...	28
Yealmpton	...	...	...	...	...	...	11
Wembury	...	...	...	...	...	...	8
Tamerton Foliot	...	...	...	...	...	...	18

Of the total number of houses inspected the Bedroom accommodation is as under :—

Total 1 Bedroom	Total 2 Bedrooms	Total 3 Bedrooms
54	187	20

HOUSES ERECTED & WATER CERTIFICATE GRANTED AND SCHEDULE OF WORK DONE.

Parishes where Houses have been erected.

Brixton	1
Compton Gifford	3
Plympton St. Mary	4
St. Budeaux	3
	—
	11
	—
1. Cases of over-crowding dealt with	8
2. New Water Closet entirely erected and Flushed ...	64
3. Wall and Roof of Water Closets raised and otherwise put in good repair and Flushed	53
4. New Closets erected or entirely New Conveniences hand Flushed	3
5. Privies converted into Water Closets, Flushed ...	3
6. Earth Closets converted into Water Closets, hand Flushed	16
7. Earth Closets erected	3
8. Privies converted into Earth Closets	1
9. New Drains laid and connected to Sewers	118
10. New Drains laid and connected to Cesspits	4
11. Drains Repaired	24
12. Drains Tested with Smoke	138
13. General Nuisances abated	13
14. Houses or Rooms Fumigated, including those after cases of Consumption	75
15. Schools Fumigated	2
16. Samples of Water taken for Analysis	12
17. Samples of Water found unfit	2

I am, Gentlemen,

Your obedient servant,

WM. E. HORTON,

Sanitary Inspector.

LIST OF PLACES WHERE DISINFECTANTS ARE KEPT.

AND MAY BE OBTAINED FREE OF COST.

Bickleigh	...	...	Roborough	...	Miss Rouse
Brixton	...	...	
Cornwood	...	...	Cornwood Village		Mr. Shepherd
			Lutton	...	The Policeman
Compton	...	...	...	...	Mr. J. Davy
Eggbuckland	...	...	...	...	Mr. S. Jago
Weston Peverell	...	...	...	...
Plympton St. Mary	...	...	...	...	Mr. Horton
					(Sanitary Insptr.)
			Colebrook	...	Mr. T. Enfield
			Sparkwell	...	Mr. W. Yeoman
			Lee Mill	...	Mr. R. Harper
			Venton	...	Mrs. Collins
			Hemerdon	...	Mr. S. Perry
St. Budeaux	...	...	Honicknowle	...	Mr. Fairweather
			„	...	Mr. Jasper
			Crownhill	...	
Shaugh	...	...	...	...	The Post Office
Tamerton	...	...	...	...	The Post Office
Ermington	...	...	...	...	Mr. T. Worth
			Cadleigh Park	...	Mr. Pawley
Holbeton	...	...	...	...	Mrs. Cause
Newton Ferrers	...	...	...	...	Mr. E. Horton
Wembury	...	...	...	...	Mr. Drake
Yealmpton	...	...	...	...
Plymstock	...	...	...	...
			Oreston	...	Mr. T. Cooms
			Elburton	...	Mr. Coleman
			Hooe	...	Mr. Brewer
			Turnchapel	...	Mr. Bennett





